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Research paper

Facebook for informal language learning: Perspectives from tertiary language students

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Abstract

This paper investigates the use of *Facebook* for out-of-class, informal language learning. 190 New Zealand university language students (Chinese, German, French, Japanese and Spanish) completed an anonymous online questionnaire on (1) their perceptions of *Facebook* as a multilingual environment, (2) their online writing practices and (3) their views on the educational value of their experiences. Findings indicate that language students are using a range of *Facebook* features to expose themselves to the languages they study (L2) and to communicate in their L2 with native speaker *Facebook* friends. The use of the social networking site varied according to proficiency-levels of the participants (beginner, intermediate and advanced levels), strength of social ties with native speaker *Facebook* friends and personal attitudes towards the site. Learning experiences on *Facebook* were not perceived as useful for the formal language learning context which suggests the need for bridging strategies between informal and formal learning environments.

Keywords: *Facebook*, informal language learning, social networking.

1. Introduction

Facebook has developed into the largest social networking site worldwide in the last eight years. Network founder Mark Zuckerberg recently announced that one billion people used *Facebook* in a single day (*The Guardian*, 28 August 2015). This not only refutes media claims of dwindling user numbers - *More Than 11 Million Young People Have Fled Facebook Since 2011* (*Time*, 2014) - it also consolidates the position of *Facebook* as an established communication platform in today's society.

For many of our language students, *Facebook* is part of their everyday routine. Used to chat and following the social activities of friends, the social networking site enables people to manage many aspects of their social life in one place. No wonder that teachers are keen to tap into this resource, get their students' attention and use the communication tools in their courses. *Facebook* has quickly established itself in the world of education and while initially met with criticism (Madge *et al*, 2009) and banned in schools (Bramble, 2009) it is now widely used in academia (Leaver & Kent, 2014).

Language educators, who are also often "on *Facebook*", have found innovative ways of using the social networking site for language practice, exposure and communication (Blattner & Fiori, 2009; Blattner & Lomicka, 2012; Mills, 2011; Promnitz-Hayashi, 2011) or to train and prepare language learners for the appropriate use of *Facebook* in the

target language (Prichard, 2013; Reinhardt, 2013). While often conversational and informal in tone, the use of *Facebook* in educational settings is considered as *formal* (Meskill, Guan & Ryu, 2012). Embedded in the curriculum, *Facebook*-based tasks are part of a formal language assignment, requiring student participation and formal assessment procedures.

The *informal* use of *Facebook* on the other hand refers to learner-initiated use of the social networking site for communication with native speakers. These interactions are more difficult to track and quantify and have received less attention in the literature and are less well understood. White (2009) has produced some anecdotal evidence from an online tandem project where language students extended their interactions on *Facebook*. Similarly, Lamy (2011) reported that her distance students created a *Facebook* group alongside the institutional online discussion forum to bridge the time between teaching modules. Sockett and Toffoli (2010) found that language students use *Facebook* on study abroad to establish new contacts and also to maintain friendships with native speaker friends on their return. Sockett (2011) also reported that 30% of English-language students at a French university used *Facebook* to communicate with English native speakers.

It is the aim of this study to shed some light on the informal second language (L2) *Facebook* practices of tertiary language students. I will start with a short discussion on informal learning, followed by a description of *Facebook* as a toolkit for communication. The study itself analyses the use of *Facebook* features for language exposure and language use and the participants' evaluation of their L2 *Facebook* experiences for language learning.

2. Background

2.1. Informal language learning

Learning situations outside accredited institutions can be *non-formal* or *informal*. The term *non-formal learning* is commonly used to describe organised learning activities which take place in alternative learning environments, such as online or evening language classes. This type of learning is planned and is intentional from the learner's perspective. *Informal learning* on the other hand is usually unplanned and the result of everyday activities related to work, family and leisure (Cedefop, 2009).

According to Rogers (2008) informal learning is "the foundation of all the new learning and all education" (p. 137). Similar to Schugurensky (2007) he makes the point that informal learning "teaches each of us our place in the society we inhabit" (Rogers, 2008, p. 137). It allows us to "assimilate values, attitudes, behaviours, skills and knowledge which occurs in everyday life" (Sockett, 2014, p.10). And while people are often not aware of the acquisition of skills and knowledge at the moment, they might well develop this understanding retrospectively. Informal learning is by definition not only lifelong but also "lifewide" (Rogers, 2008, p. 113).

Rogers (2008) and Schugurensky (2007) differentiate between two types of informal learning, defined by their degree of intentionality. Incidental learning describes learning situations which are not intentional, but in which the learner is aware of learning. Rogers refers to this type of learning as *task-conscious learning*: "learning is not conscious but takes place while engaged in some activity and where achievements are measured not in terms of learning but of task-fulfilment" (p. 134). *Learning-conscious learning* on the other hand describes learning which is "intended and conscious and achievements are measured in terms of learning" (p. 134). In learning-conscious or self-directed learning, the learner is in control of the learning situation and might even include a 'resource person', but not an educator (Schugurensky 2007). Eaton (2010) points out that in language learning situations, such a person is often a more advanced

language learner or a native speaker. *Task-conscious* and *learning-conscious learning* present two ends of a continuum and learners are likely to shift in between the two. As Benson (2011) explains, "in 'self-directed naturalistic learning' the learner sets up a naturalistic learning situation with the intention of language learning, but once engaged in the situation, switches the focus of attention to communication, enjoyment or learning something other than the language itself" (p. 139).

The majority of human learning occurs in informal contexts (Eraut, 2000 in Rogers, 2008) and *Facebook* is one place or tool amongst many that increases the choices and opportunities for language learners to create naturalistic learning situations. Toffoli and Sockett (2013) claim that English-language students in France "spend more time learning English informally than they do in the classroom" and they suggest that this leads to "unexpected changes in language skills and repertoires" which they add are often "out of step with learning as envisaged by the teacher" (p. 1). Others are more critical. Kabilan *et al* (2010) found that university students consider *Facebook* as a useful learning environment to learn English. Nevertheless they consider the integration of predetermined learning objectives and outcomes necessary for learning experiences to be meaningful.

Facebook illustrates the concept of informal learning on a number of levels. First, for its informal setting. This makes it so appealing both for educational institutions and businesses who hope to create more direct and more personal connections with students and clients. While a website usually represents the formal and official side of a business or university, the *Facebook* page is often used to provide more personal insights of the organisation. Second, the language used on *Facebook* is usually informal and conversational. People write the way they speak and specific writing styles have developed, shaped by the affordances of individual communication features (status update, comment, private message or chat). And finally, most people have learned how to use *Facebook* by using it, rather than by reading a manual. They learn how to use individual features by trial and error or by asking friends, and adopt specific conventions and writing style by observing and copying their peers.

2.2. *Facebook: a communication toolkit*

Facebook offers a range of communications features, which have been expanded and refined since it was first opened to the public in 2006. For example, the status update line initially included the prompt *is* after the username, triggering users to write about themselves in the third person. This practice, referred to as the "Third-Person Epidemic" (Bazell, 2011) by some critics, continued for some time after the prompt was taken away. Writing in the third person had developed into a social practice – a way of writing associated with *Facebook*. Other features were introduced over time to create more options for status update feedback. Comments and replies to comments allowed for multiple conversation threads (sometimes in different languages!) developing from one status update. In addition, users are also able to show their non-verbal support of their friends status updates and comments by clicking on *like* the thumbs-up hand symbol placed underneath the text fields. Status updates and comments appear on the user's timeline and are public by default. However, the privacy settings allow a range of access levels, from open to everybody to selected friends on *Facebook*. Both status updates and comments can be deleted or edited by their authors.

Chat (introduced in 2008) and private messaging are used for private communications between two *Facebook*-friends. Other friends can be added, and depending on the privacy setting of users, it is also possible to chat and private message non-friends. Chatting, similar to texting (Chrystal, 2010), has engendered a number of writing practices, such as the use of abbreviations, emoticons and the asterisk to correct

spelling mistakes. Chatting and private messaging have impacted on traditional ways of communication. The chatting feature, for example allows friends to open multiple chat windows and to have several conversations at the same time. Private messaging, the asynchronous version of chatting, also referred to as "gmail-killer" (Gabbatt & Arthur, 2010) has replaced email for many people which ironically used to be perceived as an informal communication channel, and is considered now by many as a formal communication tool).

Groups are a *Facebook* feature which allows people who are not *friends* to communicate with each other and to share information. Groups can be public or private (open, closed or secret) and are widely used in education.

Facebook is used for communication, but also to follow the activities of others. A survey conducted by Pew Research in 2013 showed that *Facebook* was used by 68% of people to see what friends and family are up to, 62% use it to see photos and videos from family and friends and 28% to share photos or videos. A more recent study from the same organisation in 2015 reports that the majority of *Facebook* users (63%) say that the social networking site serves as a source for news about events and issues outside the realm of friends and family.

Finally, *Facebook* is not only a communication toolkit and a source for information, it is also a language kit. People all over the world can join the network and set it up in their language. Posts in others languages can be translated by clicking on the *translate this* link underneath foreign language status updates and comments. Also, users are able to *like* Facebook pages in any language. To *like* in this context means to subscribe to a page. Once a page is *liked* all posts from that page appear on the user's news feed.

Facebook is a versatile tool for communication and exposure to information. This exploratory study seeks to find out to what extent language learners make use of these functions in their L2. This investigation is led by three research questions:

1. Do language students use *Facebook* to create a multilingual environment? Are they aware and do they make use of the language tools on *Facebook* to expose themselves to their L2?
2. Do language students use their L2 to write and communicate on *Facebook*? If yes, which tools are they using and what are their online language practices?
3. How do language students evaluate their learning experiences on Facebook? How useful are they perceived for L2 exposure, L2 use and language learning?

3. Method

3.1. The participants

190 university language students of beginning (24.1%), intermediate (37.2%) and advanced (38.7%) levels participated in this study. Of the 143 female and 48 male participants 23 studied Chinese, 72 French, 41 German, 35 Japanese and 62 Spanish (some students studied more than one language). Half (50.3%) of the students were aged 17-19, 35.1% were 20-22, 9.9% 23-25 and 4.7% older than 26.

3.2 The instrument

A questionnaire was developed in discussion with seven advanced language students learning French, German, Japanese and Spanish. As active users of *Facebook*, they were able to bring in their own experiences, suggest questions and clarify *Facebook* related terminology.

The questionnaire was structured in three parts and addresses 1) the multilingual appearance of the student's *Facebook* profile (through language settings, liking pages,

groups, sharing, native speaker *Facebook* friends), 2) language practices on *Facebook*, such as writing status updates, commenting, chatting and private messaging, and 3) the participants' views on the educational value of their online experiences. A range of answer choices (multiple-choice, Likert-type scale and open-ended) were selected to enable participants to indicate preferences and to elaborate on their views and practices. In addition, demographic data was collected about gender, age, enrolment in language courses and participation in language exchange programmes. The questionnaire was piloted with a small group (n = 10) and ambiguous questions were reworded. The final questionnaire consisted of 33 items.

3.3. Data collection and analysis

An email with a link to the online survey was sent to all 698 students of the language department, explaining the purpose of the study and encouraging students to participate even if they were not using the SNS in the language they study or if they were not *Facebook* users. 190 responses were received (response rate 27%), including 12 from non-users.

The data was collected with *SurveyMonkey*, an online questionnaire tool. Preliminary analyses were also conducted on *SurveyMonkey*, such as comparisons of language groups and proficiency levels. As the differences between language groups seemed most significant, I decided to take a closer look at the beginner, intermediate and advanced language levels and exported data files for each level to *Excel*. The means and standard deviations of each item were calculated and the open-ended answers thematically coded. For further analysis the whole data file was cleaned and exported to SPSS. ANOVA was used to analyse the differences between the three groups (beginners, intermediate and advanced). Further, Spearman's rank-order correlation was used to measure the strength of association between the variables of part one (7 items for L2 exposure, Cronbach's Alpha .786, with deletion of the item on translation, which showed the reverse pattern, .857 and the evaluative item of part three, and then again between the variables of part two (4 items for L2 use, Cronbach's Alpha .859) and the corresponding item of part three.

4. Findings

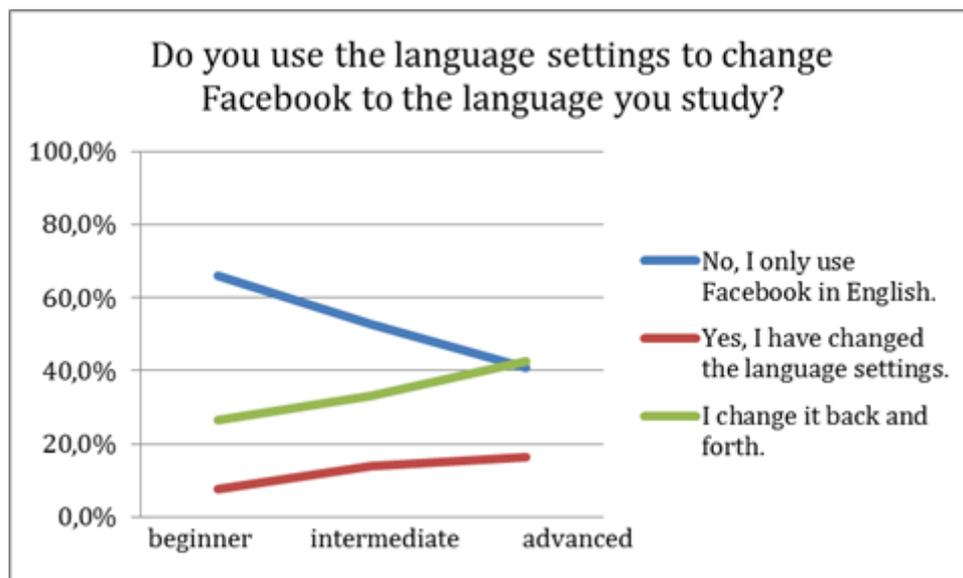
4.1. The perception of *Facebook* as a multilingual environment

Part one of the questionnaire addressed the first research question and sought feedback on the participants' perception of *Facebook* as a multilingual environment. They were asked if they made use of the language features, such as changing the language setting to the language they study, subscribing to L2 *Facebook* pages by *liking* them and by joining L2 *Facebook* groups. Further, I was interested to find out if they had native speaker *Facebook* friends and how they met them, if they followed their activities by looking at their photos and videos they share, if they read their friends' status updates, and if they used the *Facebook* translation tool to understand their friends' messages.

4.1.1. Language settings

Over half of the participants (54%) indicated that they used *Facebook* in English (or their native language), a third (32%) changed the setting back and forth and only 14% used the settings in their L2. The response distribution, however, changed when responses were grouped into levels of proficiency (see graph 1). The more advanced in their language study, the more likely language students were to change the settings to the target language, and they were also more likely to change them back and forth between languages (42.6% of the advanced students, as opposed to 26.4% of the beginners). Changing the settings back and forth seemed to be the preferred choice of

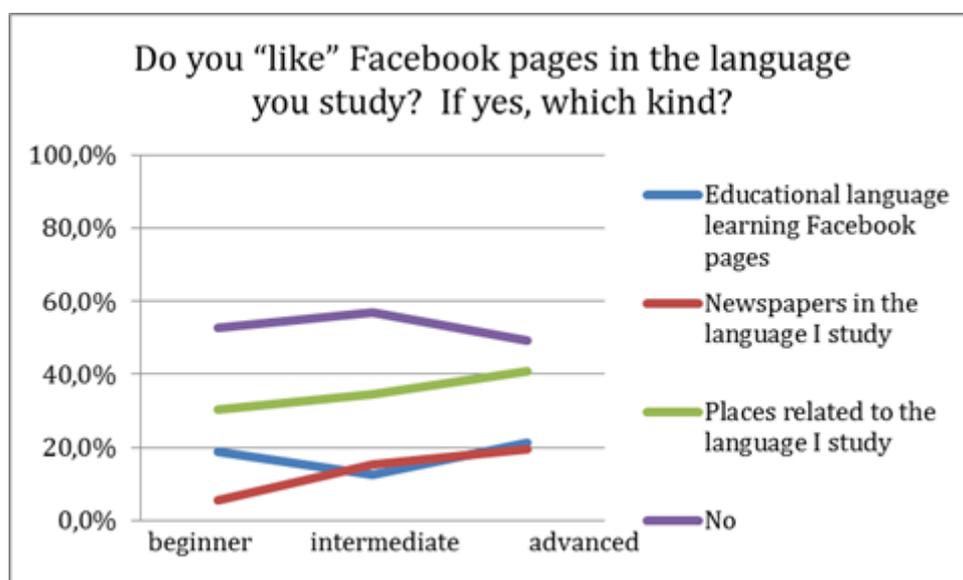
advanced language learners. Interestingly, not all participants were aware of this feature.



Graph 1. Language settings.

4.1.2. Liking pages

Half of the participants claimed to *like* pages, mostly pages that related to target language countries. The comments revealed that some of the participants did not know about this feature, never considered it for their L2, or abstained from liking content altogether. However, if they *liked* pages, they preferred entertaining and humorous content.

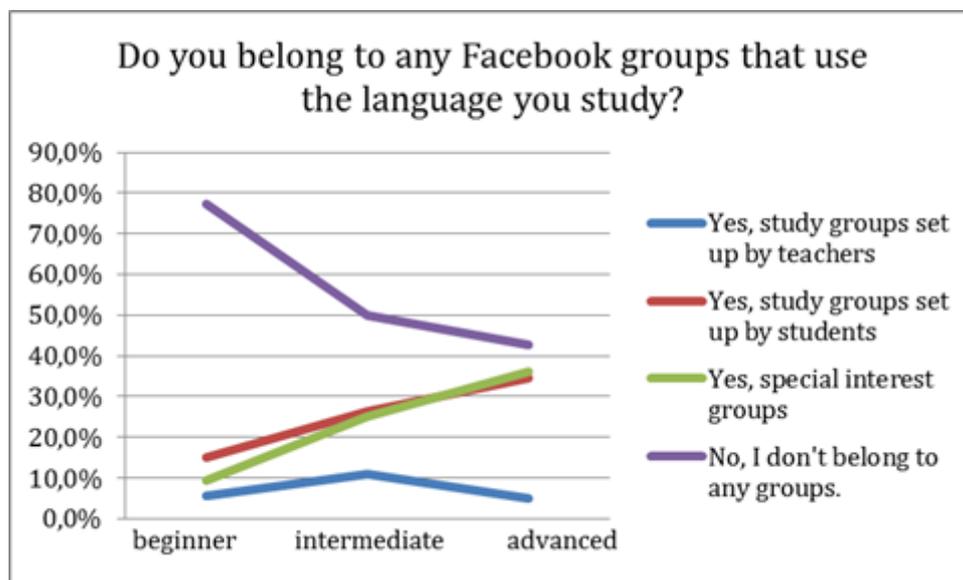


Graph 2. Liking pages.

4.1.3. Facebook groups

Participants were also divided in regard to their use of L2 *Facebook* groups. Over 55% indicated that they did not belong to any group. This number was much higher for beginners, 77.4%, as opposed to 42.6% for the advanced students. The more advanced the language level, the more likely they were to be part of a study group set up by

students and to belong to special interest groups. Groups initiated by teachers were the least represented (only 4.9% for advanced) and the comments revealed that these groups were formed in high school or during school exchanges.



Graph 3. Facebook groups.

4.1.4. Native speaker Facebook friends (NSFBFs)

The question about their native speaker friends on *Facebook* was divided in two parts. The first part inquired if they had NSFBFs and the second asked more specifically how they had met them. The pre-defined answer choices from the questionnaire (language exchange, the university's buddy program for international students or holiday) were complemented by 60 comments with additional places. Overall, 87% had NSFBFs (77.4% beginners (B), 96.7% advanced (A)). Over 80% of the intermediate (I) and advanced students indicated that they had met their NSFBFs during a language exchange program and the comments showed that they referred primarily to high school exchanges. 50 of the 60 comments referred to meeting places in New Zealand: they had met native speakers during their exchange to New Zealand, at school and at university, while travelling or working, through friends and family, at parties, in church or at the tramping club - only one of them indicated that they had met them online or through other *Facebook* friends.

4.1.5. L2 News Feed

A Likert-type scale ranging from 1 (*never*) to 5 (*all the time*) was chosen to measure attention to L2 items in the participants' *Facebook* news feed, such as their friends' status updates, comments, photos and other items they shared. While all participants indicated some interest in L2 items in their news feed ($x = 3.5$), the mean differences between the language levels is significant ($p = .014$). Advanced learners paid more attention to all L2 items appearing on their news feed (see table 1).

4.1.6. Translation

Posts in a language other than the chosen language setting appear automatically with the link *see translation*. This means that this feature can only be used if the settings have not been changed to the target language. Participants made limited use of this feature ($x = 2.41$), and even less as they progressed in proficiency ($p = .041$). Interestingly, beginners did not comment on the feature. Intermediate and advanced learners explained that they usually did not need a translation, unless the language was

“very casual” or if they encountered languages other than the language they study. They also explained that they did not trust the *Bing* translation and found that the translations were often “inaccurate”, “incomplete”, “usually not correct” or “wrong”. If they used it, it was with caution, or for “fun”.

4.1.7. Sharing

Participants would pay attention and read L2 items of their news feed but they were less inclined to share this content on their own page ($x = 1.97$). The comments provided two reasons for this. They explained that it would exclude their L1 audience, or seem “pretentious”. Others explained that they did not use the sharing function generally and therefore saw no point for using it in their L2.

Table 1. L2 exposure at beginner, intermediate and advanced levels (descriptive statistics and ANOVA).

		N	Mean	SD	F	Sig.
Attention to L2 items in news feed	Beginner	40	3.10	1.150	4.360	.014
	Intermediate	65	3.55	.830		
	Advanced	62	3.66	.974		
	Total	167	3.49	.987		
Follow reading	Beginner	33	2.88	1.317	3.477	.033
	Intermediate	60	3.37	1.207		
	Advanced	61	3.54	1.042		
	Total	154	3.33	1.188		
Follow photos	Beginner	34	2.68	1.471	2.751	.067
	Intermediate	61	3.05	1.296		
	Advanced	61	3.30	1.006		
	Total	156	3.06	1.248		
Follow videos	Beginner	34	2.26	1.399	.761	.469
	Intermediate	60	2.42	1.266		
	Advanced	61	2.57	.974		
	Total	155	2.45	1.191		
Follow articles	Beginner	33	2.00	1.275	2.368	.097
	Intermediate	61	2.28	1.227		
	Advanced	61	2.54	1.042		
	Total	155	2.32	1.178		
See translation	Beginner	40	2.78	1.291	3.258	.041
	Intermediate	65	2.43	1.212		
	Advanced	62	2.16	1.089		
	Total	167	2.41	1.204		
Share L2 items	Beginner	40	1.80	1.091	1.067	.346
	Intermediate	65	1.95	.991		
	Advanced	62	2.10	.970		
	Total	167	1.97	1.009		

4.1.8. Summary: Facebook as a multilingual environment

In response to research question one: The use of multilingual features increased with proficiency. Beginners operated mainly in their L1 on Facebook. While most of them had connections to native speakers and access to L2 materials, they made only limited use

of these resources. Intermediate learners used more L2 *Facebook* features to expose themselves to their L2. They used *Facebook* to maintain friendships with native speakers they met on high school exchanges and they used L2 setting, likes and groups. Most advanced students had a good idea of how to use *Facebook* to get more language input. They were aware of it and used a variety of features. Mostly, however, they used *Facebook* to communicate with their native speaker friends.

4.2. Facebook writing practices of language students

The second research question was concerned with the L2 writing practices of language students. The questions are divided into three parts. The first part deals with the use of L2 in the public space of *Facebook*, status updates and comments. The second part asked about the use of the communication features that are only visible to the involved communication partners, private messaging and chatting. Thirdly, they were asked to describe their L2 chat interactions and their use of online writing tools.

4.2.1. Public communications

4.2.1.2. Status updates

Very few participants wrote status updates in their L2. Those in the beginner category did not comment but the mean of 1.9 indicates that they only rarely used their L2 for this purpose, possibly because of their lack of language. However, intermediate learners also had a low mean of 1.84. Their reasons for not posting were similar to those for not sharing L2 content: they did not want to exclude or alienate their L1-speaking audience. Some considered posting in a foreign language as “rude” or “weird”. One participant explained that she wrote on her friend’s wall to avoid this issue. However, both intermediate and advanced learners explained that they wrote status updates in their L2 during their stay in the target language country. Two participants commented that they were not using the feature in general.

4.2.1.3. Commenting

Commenting was only slightly more popular than writing status updates ($x = 2.54$). Some beginners ($x = 1.84$) said that they commented on each other’s timelines out of fun. Intermediate ($x = 2.69$) students said they commented occasionally on the posts of their native speaker friends but found it, as one participant put it “a bit embarrassing”. The advanced students ($x = 2.8$) were a bit more forthcoming in their public interactions with native speakers and said that they responded to statuses, commented on photos and left birthday messages.

4.2.2. Private communications

Participants seemed to prefer to communicate privately with their friends, either synchronously via chat, or asynchronously by exchanging private messages.

4.2.2.1. Private message

Beginners ($x = 1.82$) found it difficult to engage with native speakers, not only because of the language barrier but also because they had fewer NSFBFs or they did not know them well enough to contact them directly. Learners at the intermediate ($x = 2.71$) and advanced level ($x = 3.07$) had a closer connection to their NSFBFs and used private messaging to maintain relationships from their school exchange and to communicate with their host brothers and sisters and other native speaker friends.

4.2.2.2. Chatting

Chatting also increased with proficiency. While the means are lower for chatting ($x = 2.64$) than for private messaging, the comments suggest that chatting was the preferred communication channel of all interaction types *Facebook* offers. Yet, it was

more difficult to achieve, in particular for students of European languages due to the 12 hours' time difference between New Zealand and Europe.

Table 2. L2 use at beginner, intermediate and advanced levels (descriptive statistics and ANOVA).

		N	Mean	SD	F	Sig.
Status Updates	Beginner	38	1.84	.886	.689	.504
	Intermediate	64	1.84	1.042		
	Advanced	61	2.03	1.016		
	Total	163	1.91	.996		
Comments	Beginner	37	1.84	.898	11.825	.000
	Intermediate	64	2.69	1.037		
	Advanced	61	2.80	1.030		
	Total	162	2.54	1.070		
Private message	Beginner	38	1.82	.926	15.543	.000
	Intermediate	63	2.71	1.170		
	Advanced	61	3.07	1.109		
	Total	162	2.64	1.189		
Chat	Beginner	37	1.81	.967	4.625	.011
	Intermediate	63	2.19	1.162		
	Advanced	59	2.53	1.180		
	Total	159	2.23	1.152		

4.2.2.2.1. Chatting practices

The second question on Facebook chat was open-ended to allow for a broader range of responses on chatting practices. Some beginners of Spanish and intermediate learners of Chinese and Japanese used chat to practice their L2 with their classmates. Their conversations would often revert back into English, but participants made a point of using greetings and short phrases in the L2 at the beginning of a conversation.

Intermediate level learners explained that their conversations with native speakers varied depending on the nature of their relationship (just as in their L1) and on the language abilities of their friends. If their native speaker friend spoke their language, they sometimes mixed the languages, by starting in the L2 and carrying on in the L1 for more detail, by swinging back and forth "sometimes in the same sentence", or by taking turns so that both partners had a chance to practice their L2. Some friends corrected them, while others did not in order to keep the flow of the conversation. Some participants expressed their frustrations with L2 accents and auto-correction programs, whereas others avoided the problem by changing the language settings on some of their electronic devices to communicate in the L2.

The advanced learners provided similar responses but tended to use their L2 more exclusively. Some participants explained that chatting gave them the opportunity to apply the language they learned during their time in the target language country.

Intermediate and advanced learners reported the use of abbreviations (L2 texting conventions), although some made a point of spelling words out properly and also to correct their sentences. The use of emoticons was usually reflecting habits in their L1, except for Japanese, where emoticons were perceived as a cultural convention.

4.2.3. Use of online writing tools

The use of dictionaries was quite low ($x = 2.2$) irrespective of proficiency level. However, as comments revealed, the type of dictionary used varied. Beginners seem to use more random dictionaries (or rely on the *translate me* function) whereas more advanced language learners listed a range of established dictionaries such as the online versions of *Larousse* for French or *Pons* for German.

Google was slightly more popular ($x = 2.9$) but again, no increase or decrease between levels. However, beginners and advanced language learners used *google* differently. Whereas beginners entered words and phrases in *google translate* to get translations, some advanced learners used the *google search engine* to check the accuracy of their own phrases and expressions by counting the number of hits.

The last category, the use of native speaker phrases ($x = 2.91$) increased with proficiency levels and is significant between beginners and advanced learners (LSD post-hoc test $p = 0.028$). This indicates that advanced learners are most likely to use phrases they see used by native speakers when writing in their L2 on *Facebook* (see table 3).

Table 3. Use of writing tools at different levels (descriptive statistics and ANOVA).

		N	Mean	SD	F	Sig.
Use dictionary	Beginner	36	2.22	1.37	.730	.484
	Intermediate	64	2.07	1.14		
	Advanced	60	2.33	1.08		
	Total	160	2.20	1.17		
Use Google	Beginner	38	2.97	1.42	.794	.454
	Intermediate	64	2.76	1.30		
	Advanced	61	3.04	1.18		
	Total	163	2.92	1.29		
NS phrases	Beginner	38	2.60	1.46	2.631	.075
	Intermediate	64	2.84	1.37		
	Advanced	60	3.20	1.08		
	Total	162	2.91	1.30		

4.2.4. Summary: L2 writing practices on *Facebook*

To summarise the findings of the second research question: Participants were reluctant to use their L2 in the public spaces of the social networking site. Public posts are written with readers in mind and while most participants had L2 friends, they related more strongly to their L1 friends. The interactions with native speaker friends happened in the private channels on *Facebook*, both chat and private message, and increased with proficiency and number of close native speaker friends.

4.3. Perceptions of usefulness

The first two parts of the questionnaire investigated the participants' use of *Facebook* for L2 exposure and L2 use. The third part addressed their perceptions on the usefulness of their experiences. Two questions asked them to rate the degree of usefulness for 1) L2 exposure and 2) L2 use on a 5-point scale, 1 standing for *not useful at all* and 5 for *very useful* (table 4). The responses to these questions were compared with the responses from part one and part two to establish if perceived usefulness and actual (self-reported) use correlated. Finally, for the last open-ended question

participants contrasted language learning situations on Facebook with their classroom experiences.

Table 4. Perceptions of usefulness at different levels (descriptive statistics and ANOVA).

Useful ...	Level	N	Mean	SD	F	Sig.
to be exposed	Beginner	35	2.69	.900	2.95	.055
	Intermediate	63	2.86	.877		
	Advanced	59	3.14	.955		
	Total	157	2.92	.924		
to apply and practice	Beginner	35	2.66	.968	2.84	.061
	Intermediate	63	2.81	.931		
	Advanced	59	3.14	1.12		
	Total	157	2.90	1.02		

4.3.1. Useful to be exposed to L2

As expected, more advanced language learners found Facebook more useful for L2 exposure than less proficient learners ($p = 0.55$). Spearman's rank-order correlation between the variables *attention to L2 items in newsfeed* (part one) and *useful to explore* was strong at the advanced level ($r_s = .689$, $n = 56$, $p < .01$), weak at the intermediate level, but still statistically significant ($r_s = .265$, $n = 63$, $p < .05$) and very weak and non-significant correlation at the beginner level ($r_s = .131$, $n = 34$, $p > .05$). This suggests strongly that more advanced language learners who rated the usefulness of Facebook for language learning higher also used Facebook more extensively for L2 exposure.

4.3.2. Useful to apply and practice L2

The correlations for L2 language use (*status updates, comments, chat, private message*) and the *useful to apply and practice* variable confirmed that beginners are least likely to use the communication features in their L2. The correlations for intermediate and advanced learners were statistically significant, but not for beginners (see table 5).

Table 5. Comparison of correlations between language use variables and use to apply & practice variable at beginner, intermediate and advanced levels.

		Useful to apply and practice		
		Beginner	Intermediate	Advanced
Status updates	Correlation Coefficient	.277	.378**	.541**
	Sig. (2-tailed)	.112	.002	.000
	N	34	63	56
Comments	Correlation Coefficient	.192	.456**	.565**
	Sig. (2-tailed)	.285	.000	.000
	N	33	63	56
Private message	Correlation Coefficient	.159	.539**	.564**
	Sig. (2-tailed)	.368	.000	.000
	N	34	62	56
Chat	Correlation Coefficient	.108	.574**	.514**
	Sig. (2-tailed)	.549	.000	.000
	N	33	62	54

** . Correlation is significant at the 0.01 level (2-tailed). / * . Correlation is significant at the 0.05 level (2-tailed)

4.3.3. Facebook learning situations

The replies to question three exposed the participants' views on the usefulness of *Facebook* for language learning. The comments could be grouped into three main categories, informal environment (less pressure), observations of native speaker activities and their conversations, and conversations with native speakers, about interesting topics, using relevant language.

4.3.3.1. Informal environment (Less pressure)

Participants across all languages and levels indicated that there was "less pressure" to produce language on *Facebook* (private message or chat) compared to the classroom. Beginners were afraid to make mistakes in front of their teachers and peers and felt more confident to try out new words and phrases in private interactions with their native speaker friends. The more casual and intimate environment provided an alternative venue for shy students who were reluctant to participate in class discussions. This was expressed by an intermediate-level learner:

I am a shy person so I would hardly interact in class discussions. I usually get left out because many of them speak Spanish fluently. Facebook is a good method for me to learn the language where I get to follow my fellow Spanish friends.

Class participation can be related to proficiency but it is also a personality issue. Individual differences are well documented in second language acquisition research (Dörnyei, 2005) and people's individual preferences can also be observed on *Facebook*. As opposed to the classroom situation, language learners are able to participate at their preferred pace, as pointed out by an intermediate learner:

Less time pressure, I can write things when they come to me instead of sitting down and thinking about what to say. ... No pressure about how often or the extent to which you contribute e.g. some people are more happy to go through reading everything on Facebook without ever writing a comment and others love to write comments on everything.

Chatting itself was perceived as "high-pressure", but in a positive way, "chatting to natives, when you need to respond quickly, makes your brain work quite hard". Another advanced student placed the pressure experienced while chatting on a continuum between assignment and real interaction "more pressure than homework assignments but less than face to face conversation".

4.3.3.2. Observing native speakers

Facebook (news feed) was perceived as a good place for observing native speaker interactions. It allowed participants to get a feel on how they "interact in their daily lives" and "use colloquial terms and slang when casually conversing with friends". Some appreciated the authentic language input, "reading conversation between two native speakers not making the language easier for u to understand", an opportunity to learn colloquial language in context, "in class or if a native speaker is speaking to you directly, they would try not to use these colloquial terms and phrases". Observing their native speaker friends' interactions and activities enabled them to experience parts of their lives, "their culture, what they are interested in, the music they listen to, the videos they watch, photos of them travelling around France etc."

Interestingly, however, some of those who had regular exposure to the L2 through *Facebook* still felt that it did not support their language study, as expressed by a participant at intermediate level: "It's good enough to keep the wheels turning, as I am still intaking something at all times, but not that useful compared to actually studying it."

4.3.3.3. Talking with native speakers

Facebook creates opportunities to observe and to participate in real conversations. One advanced learner explained, "this brings my language learning into a more real and applicable light". Advanced learners generally enjoyed the variety of topics they are exposed to, "We talk about a whole variety of things". These conversations enabled them to use the colloquial language they learned during their exchange and to pick up "new words and conversational techniques or phrases".

4.3.3.4. Summary: Usefulness of L2 Facebook for language learning

The findings of part one and part two strongly suggest that L2 *Facebook* use – both passive and active – is related to language proficiency. However, the results also show that overall use, even among advanced language learners is not great. The average score of 3 (*sometimes*) on a 5-point scale indicates that the majority of advanced language learners considered *Facebook* moderately useful for L2 exposure and practice. Interestingly, even the more active participants felt that their informal language engagement was not perceived as useful in the context of formal language learning. The implications of these findings for formal language education are discussed in the conclusions.

5. Conclusions

This study explored the use of *Facebook* as a tool for informal language learning. The analysis revealed that advanced language students in particular can be skilful users of the social networking site in their L2. *Facebook* enables them to be active L2 users, even in a place as remote as New Zealand. We have also seen that established *Facebook* routines in students' L1 impact on their L2 use, and that some are opposed to using the social networking site, or some of its functions in any language. At either side of the spectrum language learners display a high degree of agency in their use of and attitude towards *Facebook* and any pedagogical approach involving the social networking site has to take this into account.

Whereas some participants provided reasons for not using *Facebook* in their L2, others were simply not aware of their options. Language learners of all levels, but mostly beginners, did not know about the language settings, and had not thought of *liking* L2 pages or joining L2 groups. Beginners were most likely to use *Facebook* exclusively in their L1 and to rely on the *translate me* function to deal with posts in other languages. Some of these participants indicated that the questionnaire made them aware of the features and their usefulness for L2 learning. It seems therefore reasonable to suggest that language learners should be made aware of the language options on *Facebook*, such as changing language settings, joining L2 groups, and liking L2 pages.

The crucial factor for L2 engagement on *Facebook* was the presence of native speaker *Facebook* friends. Beginners often lacked NSFBFs or if they had any, they often did not feel close enough to initiate or to participate in a conversation. Some intermediate learners expressed similar views. Most of their friends were English speakers, which reduced their exposure to the L2 in their news feed. Advanced learners had the highest proportion of NSFBFs with 96.7%. In addition, these contacts were often well-established through time spent in the target language country, often with host-families. These students used *Facebook* to keep in touch with their NSFBF – by following their activities on their news feeds and by communicating through chat and private messaging. Established contacts with native speakers can be a good asset for the formal language context. They can be used as a resource for language learners to find relevant materials (through pages and groups and other shared information) or for personal opinions on current issues (private channels). In addition, observing L2 interactions provides a relevant resource for the analysis of language use.

Informal language learning has long been perceived as second rate learning (Eaton, 2010) to the extent where even students do not value their own experiences as language learners. As language educators, we should start acknowledging and encouraging the out-of-class language engagements of our students and design learning activities that allow learners to draw on their experiences as language users.

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Research paper

Telecollaboration insights: learning from exchanges that fail

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Abstract

The article describes action research into a telecollaborative exchange between the Pädagogische Hochschule in Freiburg, Germany and the Pedagogical University in Krakow, Poland, which took place between October 2014 and January 2015. Both groups followed CALL teacher training study programmes and consisted of 16 students. The study aimed at evaluating the telecollaboration with regard to its effectiveness in the attainment of the planned objective which was training the students in designing CALL tasks with focus on intercultural communicative competence (the German group) or *politisches Bildung* (the Polish group). The article presents the exchange itself (the tasks, the timeline) and, as well, discusses the research data collected by means of surveys and observation in the course of the telecollaboration and upon its completion.

Keywords: Action research, telecollaboration, teacher training.

1. Introduction

Intercultural online exchanges, known and implemented for almost 20 years now, have grown in popularity in the last decade, powered by the development of Web 2.0, its practices and tools (Guth and Thomas 2011; Guth et al. 2012). The said ten years of practice have resulted in publications so numerous that it is virtually impossible to give credit to all the efforts, pedagogical and academic. To mention just a few, they include: Ware and Kramsch (2005), Darhower (2007), Fratter and Helm (2010), Guth and Helm (2010), Chun (2011), Dooly (2011), Guth and Helm (2012), Hauck et al. (2012), Dooly and Sadler (2015). These books, chapters and papers are stories of effective design of the exchanges overall as well as descriptions of tasks that have been proved successful. Reading about them is educational in a number of ways: as a point of departure for reflection on such practices; as a source of pedagogical models of telecollaboration, from the very idea and exemplary procedures to task design (1).

The very act of carrying out an intercultural online exchange is an educational experience in itself, as pointed out in many of the works cited above. From the teacher's perspective, one can experientially learn to telecollaborate as well as reflectively confront this experience with one's teaching style and other relevant individual characteristics. This article describes such an experience. Yet, unlike most of the above-quoted publications, this one is a story of failure. The telecollaboration described did not go as planned, resulting in considerable frustration on both cooperating sides. This story

is being told in the belief that reflection on such exchanges can be as insightful and educational as the analysis of successful attempts of this kind. A special focus is given to the role of teaching presence (Anderson et al. 2001), in the belief that the success (or failure) of an exchange is largely determined by the quality of the mediation – managerial (organisational), social and pedagogical (intellectual, technical) – offered by both / all telecollaborating tutors/instructors.

The article opens with the description of the background of the exchange. This covers both the review of literature locating this article in the research context as well as the account of the setting of the exchange described. What follows is a report on the course of the telecollaboration and the analysis of different aspects of the process, with special regard to student perceptions of teaching presence, defined based on the three-partite classification of teacher roles in computer conferencing proposed by Anderson et al. (2001). Several events of the exchange, including critical incidents as well as the post-hoc course evaluation are then subject to a cross-sectional analysis and discussion. The text closes with conclusions and teaching implications which the authors see as important to their own exchange as well as – potentially – educational in a broader telecollaborative context.

1. Background

In this part the two authors of the text define their own perspectives and objectives. This is to sensitise the reader to the fact that each of the telecollaborating instructors departs from a different cultural and institutional context.

1.1. The German perspective

The awareness that learning a foreign language is inevitably connected to learning about other cultures has been present in German language teaching since modern foreign languages were taught in secondary classrooms. Deriving from the classical languages, traditional cultural learning emphasis was on translating literature of the target culture and only in the 20th century the emphasis shifted to knowledge about cultural practices and pragmatic language use. During the past two decades, the concept of intercultural communicative competence (ICC) has become the overall goal of foreign language teaching and this marked the latest shift in foreign language education when the cultural dimension of language learning is concerned. As Michael Byram points out, the ICC approach looks at a new role model for the foreign language speaker: the INTERCULTURAL speaker, not the NATIVE speaker (Byram 1997: 32). The main reason for this shift is that speakers of English as a foreign language nowadays need their language competences to speak to other L2 speakers of English and they use their language skills to negotiate meaning in diverse multicultural settings. Consequently, learners of English need to acquire intercultural competences of communicating in multiple cultural contexts, which go far beyond the cultural settings of the traditional English speaking target countries.

Awareness of cultural differences, positive attitudes towards otherness, knowledge of their own and of other cultures, skills of interaction and negotiation in diverse cultural contexts are some of the manifold competences the intercultural speaker needs to master for successful communication in the foreign language. In the Common European Framework (CEFR; Council of Europe 2001), language learning is depicted in the context of a culturally diverse Europe with multilingual and multicultural societies. According to CEFR, the main goals of learning foreign languages are to raise awareness of other cultural identities and to support the encounter of cultures as an enriching experience to the foreign language speaker. Consequently, the CEFR is related to ICC as a core competence in foreign language education (Council of Europe 2001: 43). With this approach, teaching and learning foreign languages is closely connected with

political education. This connection is also central to Byram: he places *politische Bildung* at the centre of his model and defines it as *critical cultural awareness* (Byram 1997: 53).

In the school curricula of all German states ICC has been included as the overall goal of foreign language learning in secondary schools. This shows that learning a foreign language in German schools is seen as an integral part of civic education and that learners should be enabled to successfully participate as citizens in diverse multicultural settings.

The significance of ICC as an overall language learning goal can also be seen in the academic discourse in the fields of foreign language methodology and of foreign language teacher education in the past decade (Sercu 2005; Hu 2009). One of the major challenges was to find ways of practically adapting the ICC concept to the foreign language classroom. This is done, among others, by means of teaching L2 literature and film (Bredella 2002) as well as computer-assisted language learning (O'Dowd 2007). In recent years, more general approaches of integrating ICC in teaching languages with textbooks have been introduced as well (Müller-Hartmann; Schocker 2013).

1.2. The German objective

One of the most promising methods of implementing ICC learning at school are telecollaborative projects. They provide opportunities for authentic encounters with other learners of English or with native speakers all over the world. Therefore, the two main objectives of the course taught to the German teacher trainees were (i) to instruct them in the use of digital media for telecollaboration and (ii) to support their ICC development. In the latter case it had been assumed that in the process of the intercultural online encounters, by reflecting on their own learning processes during and after the interaction with the partners, and by discussing critical incidents, the students would become more aware of their own cultural identity as well as with the cultural identity of the other (Bredella 2000). This was to lead to ICC development in all four of its aspects: the knowledge about own and other cultures; the awareness of the tendency to value own culture and relativize the other; skills of interpreting and relating; and skills of discovering and interacting, all leading to critical cultural awareness (Byram 1997: 34). As these four ICC dimensions can be found in most models and standards implemented in state school curricula in Germany, their development is an inevitable part of teacher training. Additionally, by interacting with their telecollaborative partners online, using different tools, the German students would reflect on how this could be transferred to their future teaching contexts in school, preferably in the form of task-based language teaching with the use of ICT.

1.3. The Polish perspective

In the global age, teacher training (TT) in Poland is facing new challenges. First of all, prospective teachers have to be prepared for handling the growing multiculturalism of classrooms. This means that TT programmes should increasingly focus on intercultural communicative competence (Byram 2008) with its various subcompetences. The most important seem to be the ones Kramsch (2006) ascribes to symbolic competence: rendering various subtleties and complexities of meaning, also by culturally appropriate form-meaning mappings; and tolerance of ambiguity, understood in intercultural rather than psycholinguistic terms. Secondly, in the connected world of today, Polish schools need to combine content education with raising awareness about the responsibilities of the global citizen. This involves training for online citizenship, with special regard to teaching various digital literacies (Pegrum 2009 and 2014) which enable one to find, evaluate and use relevant information in cooperation with others and for mutual benefit.

If school has to teach this to its students, it is only logical that teachers themselves should be given such expertise in teacher training courses at universities.

Obviously, embracing multiculturalism and global citizenship in education are worldwide challenges. Yet, in Poland they pose a number of local problems that teacher training needs to acknowledge and tackle. To begin with, the country is fairly homogeneous in terms of its population. As a result, openness to otherness and intercultural awareness are not developed naturally, in the course of primary or secondary socialisation – they need to be explicitly taught. Additionally, and even more importantly, education for global citizenship has to start on the level of regular civic attitudes and practices, which in Poland are in great need of amelioration. As noted by the Polish Institute of Public Affairs (IPA), involvement in current affairs, voluntary work (including NGO activities), responsibility for the common property as well as social trust (confirmed based on a recent study by the Polish Polling Institute (2)) are far from satisfactory. This results in a very low level of social capital, an asset necessary for any kind of civic development.

When thinking of potential solutions to these problems to be implemented in teacher training, Poland needs to develop its own complex proposal. Yet, alongside such locally devised and applicable measures, it seems appropriate to consider and adapt routines which work in countries whose citizens show high levels of social involvement and eagerly assume civic responsibilities. According to Byram (2008: 158), such a model can be found in Germany, whose *politische Bildung* – with its attention to political education going back several decades – is both effective and devoid of the sense of indoctrination that education for citizenship may have in other countries (including the Anglophone world). Byram's appreciation of the German civic education is shared by Siellawa-Kolbowska et al. (2008) in their report from a project entitled *Civic Education in Poland – an attempt to adapt selected elements of the German experience*, carried out by the already-mentioned Institute for Public Affairs in the years 2007-2008 (3). The authors analyse the idea of *politische Bildung*, single out the mainstays of its effectiveness – the acquisition, rather than learning, of social attitudes; informal civic education – and consider the plausibility of transplanting the idea into Polish soil.

1.4. The Polish objective

Seen from the Polish perspective and motivated by the two challenges defined earlier, the objective of the Polish course, carried out as part of the ELT TT programme, was two-fold. First of all, the class was planned as telecollaborative *per se*, in order to give the trainees an opportunity to “develop their foreign language [teaching] skills and intercultural competence through collaborative tasks and project work”, something O'Dowd (2011: 342) sees as the essence of intercultural exchanges online. Simultaneously, when in search of a telecollaborative partner, priority was given to German universities, based on an assumption similar to the one adopted by Siellawa-Kolbowska et al. (2008): that in the area of good citizenship there is a lot to be learned from *politische Bildung* and those who have been exposed to it. Consequently, the hope behind such a course design was that in an exchange with their German partners, the Polish teacher trainees would be exposed to civic attitudes which they may note, reflect upon and critically compare to their own.

For the two-fold objective to be accomplished, the telecollaboration was designed in terms of both task form and chronology as well as content. On the one hand, the Polish students were supposed to get involved in an intercultural dialogue with their German partners whose aim was to meet and get to know the other. The context for the dialogue was to be provided for in a number of telecollaborative assignments, following a typical sequence of activities of differing levels of cognitive difficulty (O'Dowd and Ware 2009). Equally importantly, these tasks were planned to revolve around civic

issues, social obligations and involvement in public affairs, so as to allow both parties to be exposed to each other's ideas in the area, which was of particular interest to the Polish side of the exchange. As a result of such a design of the exchange, it was expected that the Polish prospective language teachers will embrace intercultural citizenship both implicitly / in action as well as explicitly, when carrying out relevant tasks and reflecting upon them.

2. The exchange

The telecollaborative exchange between the Pädagogische Hochschule in Freiburg, Germany and the Pedagogical University in Krakow, Poland took place between October 2014 and January 2015. The participants were a group of German second-year students of primary and secondary teacher education and a group of Polish MA students, prospective teachers of EFL and participants of the CALL TT programme. The Freiburg group consisted of 13 German and 3 Erasmus students from Croatia, Sweden and the Czech Republic, 13 women and 3 men, whose age was approximately 24. The Krakow group consisted of 16 Polish students, 12 women and 4 men, all of whom were approximately 23 years of age.

With the objectives of both partners in mind, the telecollaboration revolved around the topic of civic education and intercultural communicative competence (ICC). It followed the model delineated by O'Dowd and Ware (2009) with regard to task types and the growing cognitive difficulty of activities. It started with an introductory activity, in which the students from both national groups were asked to make short videos about themselves and share them with their partners. In addition to talking about themselves, the students were asked to present a compatriot they admired the most (the civic education element). The second task was based on the results of a survey which the students of both groups were asked to complete. In this survey, which concerned the respondents' beliefs about citizenship, the students were supposed to give their associations with a number of notions (e.g. hometown, Europe, etc.), rank and order statements such as *Good citizenship is about the future: whatever is done should be done with the next generations in mind* as well as finish sentences like *A good citizen is someone, who...* When collected, the results of the survey were put together and the students, working in international groups of 5-6, were asked to collaboratively produce mind maps showing intercultural similarities and differences. The tool used in this task was *Mindomo*, which allowed for both synchronous (chat) as well as asynchronous (notes and comments) mind mapping. The third and last assignment in the exchange involved preparing a task for the partners. Working in small (3-4) national groups, the students, based on task criteria by Müller-Hartmann and Schocker-v. Ditzfurth (2011), were asked to produce tasks for language learning with elements of civic education (Polish students) or aimed at increasing ICC (German students). When the tasks were ready, they were presented to the small partner groups for feedback. At the end of the exchange a wrap-up survey was carried out, in which the students reflected on their telecollaborative experience. The tasks and the timeline are presented in Table 1.

Table 1. The timeline of the exchange.

TASK	TASK TYPE*	DEADLINE	TOOLS	WORKING MODE
Introductory video: present yourself and then talk about	Presentation	12 Nov 2014	Screencastomatic (pl) Doceri (ger) Wikispaces	Individual

the compatriot you admire.				
In class 14-18 Nov. 2014: watching the presentations and talking about them.				
Mind mapping, stage 1: survey completion	Compare-and-analyse	19 Nov 2014	SurveyMonkey Wikispaces	Individual
In class 21-25 Nov.: discussion of the survey results.				
Mind mapping, stage 2: collaborative creation of mind maps	Compare-and-analyse	2 Dec 2014	Mindomo	Small international groups
In class 5-7 Dec. 2014: discussion of the mind mapping process				
Task creation	Create	19 Dec 2014	Wikispaces	Small national groups
Holiday 20 Dec. 2014 - 9 Jan 2015				
Task completion / analysis and feedback	Create	10-17 Jan 2015	Wikispaces	Small national groups / task product
In class: 17-20 Jan. 2015: sum up of telecollaboration				

*(Based on O'Dowd and Ware, 2009).

The telecollaborative VLE was a wiki started for the exchange at *Wikispaces*, where all the tasks were given by the teachers and submitted by the students. All other materials – introductory videos, survey results, mind maps, feedback – used in or produced in the course of the tasks – were also published on the wiki. For small-group tasks, both local and international, the project mode was used. It guaranteed that, until privacy settings were changed, the material produced within a given group was visible to its members alone.

3. The study

The study was carried out as action research throughout the whole exchange. Its aim was collecting material for the post-hoc analysis of the telecollaboration with regard to its effectiveness in the attainment of the planned objectives, which, translated into class syllabi, were: giving the students the experience of (i) designing tasks for language teaching and developing ICC (German students) / *politische Bildung* (Polish

students); (ii) incorporating new technologies into the TBL process; (iii) carrying out the process in the intercultural setting. Following from this, three research questions were asked:

1. *Will the students be able to design and evaluate language learning tasks with elements of ICC / civic education?*
2. *Will the students broaden their repertoire of ICT tools?*
3. *Will the telecollaborative setting be educational and motivating in achieving these objectives?*

The main research tool was the survey. Two different surveys were carried out in the course of the exchange: (i) the post-mind mapping survey, originally not planned, carried out after the second task; and (ii) end-of telecollaboration survey, to show what the students learned and how they evaluated their experience, including their perception of the teaching presence. All the surveys were created in and implemented via *Survey Monkey*.

The results obtained by the surveys were confronted with data continuously coming from two other sources: (i) informal in-class discussions of the telecollaborative process; and (ii) observation of the student groups in action including the analysis of task completion, both as process and in terms of product.

3.1. The onset of the exchange

Based on the in-class observations of both teachers, the telecollaboration started with considerable enthusiasm of both parties involved. The introductions were made, uploaded to *Wikispaces*, watched and discussed in class. The questions of intercultural interest raised at this point were addressed, on both sides, in the comment section of *the Introductions* subpage of the telecollaboration wiki.

However, at the stage of Task 2 (the collaborative mind mapping) the level of involvement of the German students went rapidly down. As a result, with the exception of one small international group, there was hardly any dialogue between the telecollaborating parties. When the incident – seen as critical to the exchange – was discussed in class, Polish students expressed their concern about communication problems and what they described as inertia of the German partners. German students, in turn, declared that to them the purpose of the task had been unclear. Furthermore, they were not aware of the expectations of their partners in terms of frequency and amount of turn-taking in their discussion feeds. Apart from that, they also found it hard to personally identify with their own teams and their partner teams for a couple of reasons. First, in their own national group, they had not known each other before the course and only saw each other once a week. Secondly, they claimed that they could not establish a relationship to their partner teams because the team combinations did not stay the same and they could not even identify the names of their partners on the wiki.

3.2. Collaborative mind mapping as a critical incident

In order to try to pinpoint the problem signalled in both classrooms, a post-task survey was carried out, in which the students were asked to rank the experience in 8 different categories as well as describe it briefly, in an open-ended question, naming their main concerns, the things they learned, etc. The results are presented in Figure 1 and Table 2 below.

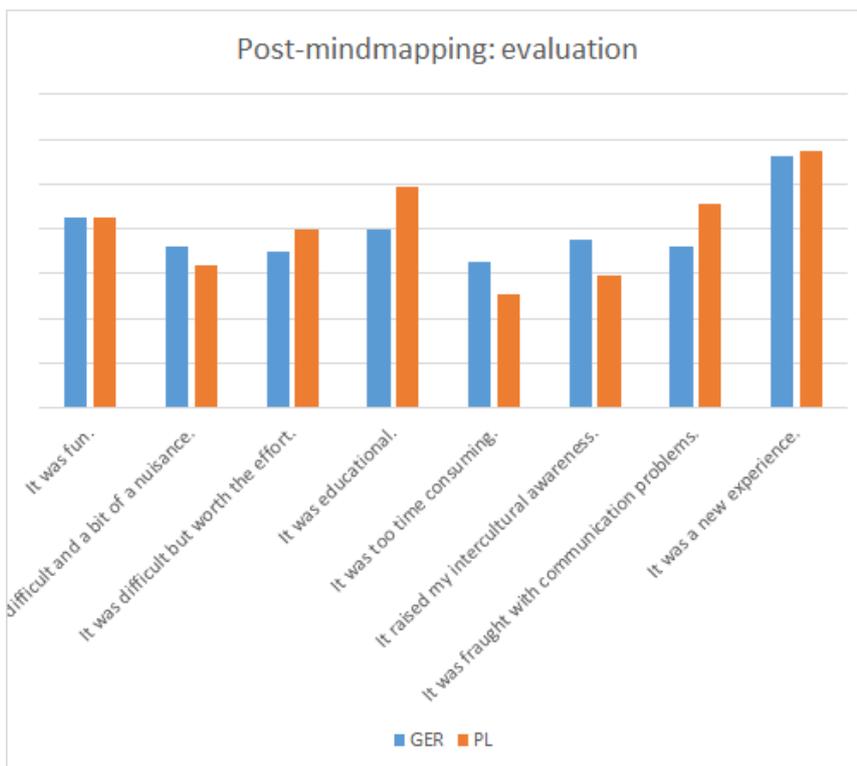


Figure 1. Post-mind mapping reflections by German and Polish students.

Table 2. Post-mind mapping reflections by German and Polish (GER / PL) students in numbers.

	Not very much	I don't know	Very much so	Weighted average	χ^2	p
It was fun.	3 / 2	5 / 9	3 / 3	2.13 / 2.13	0.997	0.61
It was difficult and a bit of a nuisance.	3 / 8	7 / 3	1 / 3	1.81 / 1.6	4.58	0.1
It was difficult but worth the effort.	4 / 4	4 / 5	3 / 5	1.75 / 2.00	0.25	0.88
It was educational.	3 / 1	4 / 4	4 / 9	2.00 / 2.47	2.6	0.27
It was too time consuming.	7 / 12	1 / 0	3 / 2	1.63 / 1.27	2.18	0.33
It raised my intercultural awareness.	5 / 2	2 / 4	4 / 8	1.88 / 1.47	2.96	0.22

It was fraught with communication problems.	4 / 4	6 / 3	1 / 7	1.81 / 2.27	5.21	0.07
It was a new experience.	0 / 1	2 / 0	9 / 13	2.81 / 2.87	3.41	0.18

In both national groups attitudes towards the activity were very individual, with more uniformity visible in the Polish answers. While German students generally agreed only on the last statement – collaborative mind mapping was a new experience for them – Polish responses show that the experience was by and large perceived as new, rather educational, and quite effective in intercultural awareness-raising. Yet, as demonstrated by χ^2 and p values, the differences between the two groups turn out to be statistically insignificant (Table 3).

The answers to the open-ended question, inviting reflection on the experience, add some new insights in both groups. The German students, in addition to occasional comments on time pressure, quite frequently (5 out of 9 comments) mentioned low motivational value of the task. Polish students, in turn, generally (11 out of 14) confirmed what they stated in class: the task was fraught with communication problems. Comments pertaining to intercultural awareness raising were scarce. One German student noted that, as a result of this activity, s/he learned that Polish people are patriotic and conservative, which shows that, on occasion, the activity might have reinforced stereotypes.

3.3. The tasks

Towards the end of the exchange, in December 2014 / January 2015 the language tasks with the focus on ICC / civic education were completed and evaluated by both the two teachers and the partnering groups. The evaluation was based on the 5 criteria enumerated by Müller-Hartmann & Ditzfurth (2011):

1. Does the task have the potential to motivate learners to get involved? Does it have relevant, meaningful content? Does it activate learner resources? Does it have a clear communicative purpose and audience?
2. Is the task complex? Do learners have a choice? Are there rich resources? Is the task process-oriented?
3. Does the task integrate focus on form?
4. Is there interaction between learners based on real-life problem solving?
5. Is the task sequenced and does it balance demands and support?

Additionally, two criteria pertaining to the theme of the exchange were set:

1. Are competences of civic education / intercultural communication supported with the task? Are these competences well balanced with language learning goals?
2. How would the task work with Polish / German learners? Would its content and the problem to be solved be considered meaningful and relevant to real-life? Would the learners be familiar with the task format? Is the focus on form introduced in a way familiar to / preferred by the learners? Is the support offered typical of the Polish / German classroom? What - if any changes - would need to be introduced to make it work?

Both teachers as well as partner evaluators decided that the tasks devised by students from the German and Polish groups complied with criteria 1-6. Criterion 7, which was

Table 4. German and Polish (GER / PL) students: comments on the design of the exchange in numbers.

	Not at all			Very much so	Weighted average	χ^2	p
The overall aim of the exchange was clear to me.	3 / 0	9 / 1	0 / 4	0 / 9	1.75 / 3.57	22.37	0.00005
In individual tasks I always knew what is expected of me.	0 / 0	6 / 0	3 / 9	3 / 5	2.75 / 3.36	9.4	0.009
The timing of individual tasks was appropriate (enough time to complete; clear deadlines etc.).	1 / 0	2 / 0	7 / 1	2 / 13	2.83 / 3.93	15.5	0.001
The digital tools used in the exchange were usually appropriate.	0 / 0	3 / 1	3 / 4	6 / 9	3.25 / 3.57	1.59	0.44
I got clear guidelines as to the etiquette of this exchange.	1 / 0	10 / 0	1 / 3	0 / 11	2.00 / 3.79	22.98	0.00004

When it comes to the students' evaluation of the design, the Polish scores are generally much higher (Figure 5; Table 4). When the between-group comparison is carried out for individual descriptors, the German / Polish differences in how the students rated teaching presence in the area of design are statistically significant (cf. χ^2 and p values), with the exception of the perception of the tool usefulness.

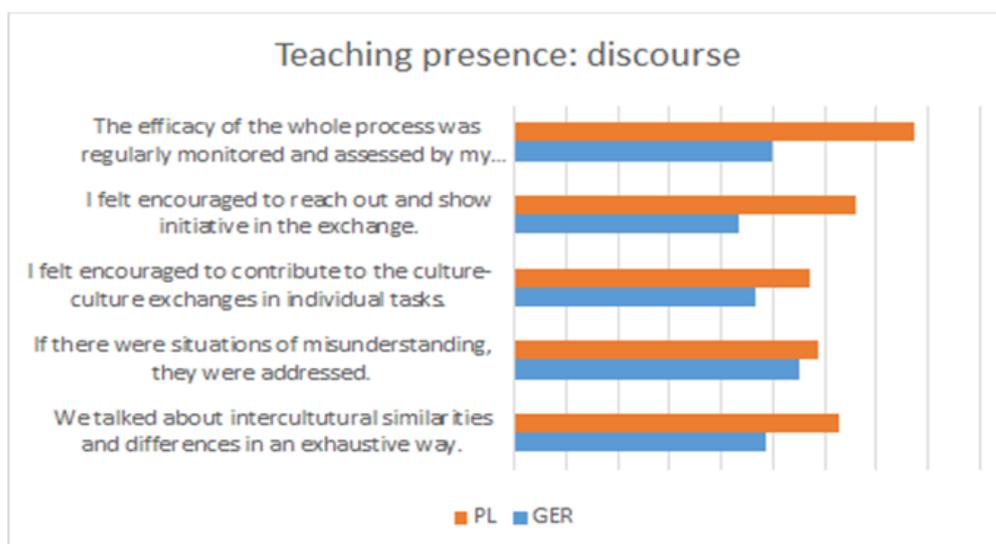


Figure 6. German and Polish students on the discourse of the exchange.

Table 5. German and Polish (GER / PL) students: comments on the discourse of the exchange in numbers.

	Not at all			Very much so	Weighted average	χ^2	p
We talked about intercultural similarities and differences in an exhaustive way.	1 / 1	7 / 2	2 / 5	2 / 6	2.42 / 3.14	5.94	0.11
If there were situations of misunderstanding, they were addressed.	0 / 1	5 / 1	5 / 10	2 / 2	2.75 / 2.93	5.21	0.15
I felt encouraged to contribute to the culture-culture exchanges in individual tasks.	2 / 1	5 / 2	4 / 9	1 / 2	2.33 / 2.86	3.74	0.29
I felt encouraged to reach out and show initiative in the exchange.	1 / 0	8 / 3	3 / 4	0 / 7	2.17 / 3.29	10.32	0.01
The efficacy of the whole process was regularly monitored and assessed by my tutor.	0 / 0	8 / 0	2 / 2	2 / 12	2.50 / 3.86	15.07	0.0005

In the area of the teaching presence / discourse, the Polish scores are again higher than those of their German partners (Figure 6, Table 5). Yet, the between-group comparison for the distribution of the answers to individual descriptors shows – based on χ^2 and p values – that the differences are statistically significant only in the last two: the perceived encouragement to reach out to partners as well as teacher monitoring and assessment.

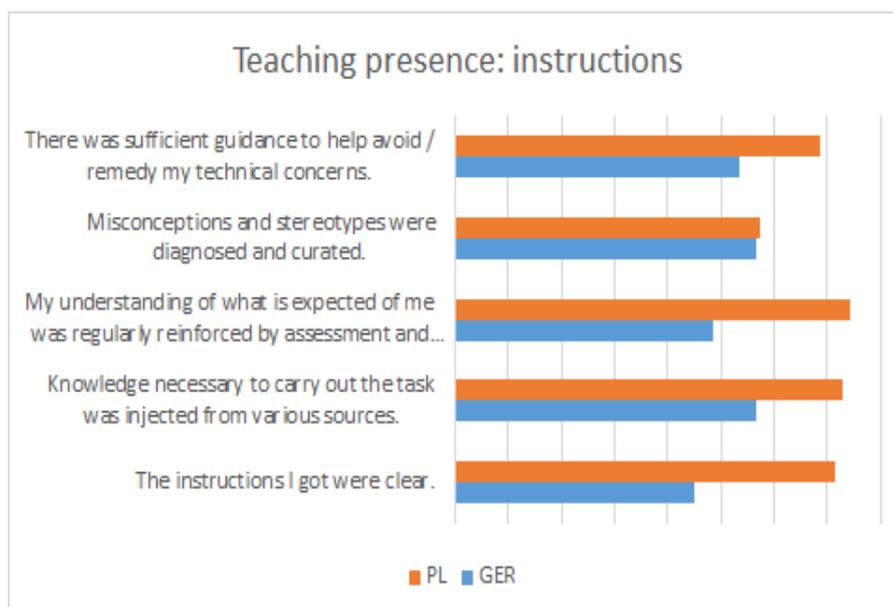


Figure 7. German and Polish students on the instructions of the exchange.

Table 6. German and Polish (GER / PL) students: comments on the instructions of the exchange in numbers.

	Not at all			Very much so	Weighted average	χ^2	p
The instructions I got were clear.	0 / 0	9 / 0	3 / 6	0 / 8	2.25 / 3.57	17.95	0.0001
Knowledge necessary to carry out the task was injected from various sources.	0 / 0	4 / 0	6 / 5	2 / 9	2.83 / 3.64	8.44	0.01
My understanding of what is expected of me was regularly reinforced by assessment and feedback from my tutor.	0 / 0	8 / 0	3 / 4	1 / 10	2.42 / 3.71	15.44	0.0004
Misconceptions and stereotypes were diagnosed and curated.	1 / 2	2 / 2	7 / 6	2 / 4	2.83 / 2.86	0.82	0.91
There was sufficient guidance to help avoid / remedy my technical concerns.	0 / 0	6 / 1	4 / 6	2 / 7	2.67 / 3.43	6.63	0.03

Similarly to the other two measures of teaching presence, the Polish average scores for the teaching presence in instructions top the German ones (Figure 7, Table 6). When it comes to the comparison between the groups regarding the distribution of answers for each descriptor, all are statistically significant (χ^2 and p values), with the exception of the German and Polish perception of how effectively the misconceptions and stereotypes were diagnosed and dealt with.

3.4.3. Students' perceptions of the critical incidents in the exchange

When addressing the critical incidents (events which changed their perceptions and attitudes in the course of the exchange), the German group made four comments. Two of them referred to aspects of the partner culture and the idea of telecollaboration. The other two were about problems the students encountered, one technical and one in terms of the exchange management.

As for the Polish group, the comments were more numerous (14) and extensive. They all referred to different incidents related to on-task interactions, which had determined the quality of the exchange, mostly the task proper (6 comments), and the mind mapping activity (4). Most of the remarks show the already-noted (cf. the post-mind

mapping survey) disappointment with the communication problems and the low level of engagement in the partner group. Most Polish comments express this in one way or another: the word *disappoint* and its derivatives are used in 4 comments; different ways of commenting on the partners' lack of motivation can be found in 8 comments.

4. Discussion

When it comes to the answers to the research questions, the first – *Will the students be able to design and evaluate language learning tasks with elements of ICC / civic education?* – can be answered affirmatively. Each small group completed their tasks successfully, as proved by the positive evaluation by both the teachers and the partner groups. Additionally – and even more importantly – task design was the competence most frequently mentioned in what the students thought they had learned as prospective teachers (Figure 2). This shows that not only was the competence satisfactorily acquired but also that the students raised their awareness of TBL as a teaching method. The latter factor seems particularly important in reinforcing teacher autonomy and the propensity for reflective education.

As for Question 2 – *Will the students broaden their repertoire of ICT tools?* – the answer is another *yes*, this time, however, with a few reservations. Most importantly, as the students noted themselves (Figure 3), the exchange had resulted in them learning selected tools, with special regard to *Wikispaces*, which was used as the VLE for the telecollaboration. Such experiential learning of ICT is valuable in at least two ways. Firstly, the fact that the tools used were a means to a telecollaborative end gave the students a chance to perceive ICT correctly: as always second to pedagogy and not the central element in the classroom. Secondly, as Cutrim-Schmidt (2014) points out, learning to use digital tools by watching an experienced teacher doing so is potentially the only pedagogically effective way of CALL teacher training. And this, it seems, is what happened in the course of the exchange described. Nevertheless, alongside the advantages, there are points that may pose concerns for both teachers in this telecollaborative exchange. It is notable that when reflecting on what they learned ICTwise, Polish students concentrated on specific tools while the German group made comments pertaining to the usefulness of new technologies as such. This may indicate that the group from Krakow could have used more reflection on the pedagogical – and not only the practical – level. Another, and likely, explanation is that the comments of the German students were rather general due to their lack of experience with the tools (the *Mindomo*-based activity was far from successful on the Freiburg side) as well as the perception that there was not sufficient guidance to help avoid / remedy their technical concerns (Figure 7; Table 8) on the part of their teacher. This may show that had more teacher assistance been offered, the answers offered by Freiburg students could have been more specific.

The answer to the final question – *Will the telecollaborative setting be educational and motivating, and help in achieving these objectives?* – is far from optimistic. While it is unquestionable that the exchange provided the experiential setting for the learning of digital tools by both groups, its motivational value is rather questionable. The German group – based on their self-reported attitudes as well as noted by their Krakow partners in both surveys – seemed uninvolved in the telecollaborative tasks. The Polish group, in turn, showed (surveys, in-class discussions) growing frustration and the resulting motivation decrease, resulting from what one of the Krakow students called *the whatever attitude* demonstrated by the partners in both collaborative activities. As a result, the tasks designed in the course of the telecollaboration did not have the intended real audience, and the culture-focused feedback and reflection were limited and rather superficial. Additionally, the shallowness of the German-Polish interaction resulted in the lack of an in-depth reflection on similarities and differences as regards

attitudes to ICC / *politische Bildung*; it even seemed to have occasionally reinforced stereotypes, resulting in comments as the one made by a German student in the post-mind mapping survey. All this seems to be seriously problematic and, consequently, a significant drawback of the exchange. As such, it will be discussed at greater length than the two previous issues.

Based on the results of the final survey (Figures 5-7; Tables 4-9), it seems that the blame for the shortcoming described above can be, at least partly, put on the insufficient teaching presence on the German side. The perceptions of the Freiburg students of their teacher's support in all three areas – design, discourse and instruction – were notably less favourable than those made by their Krakow partners, and most of the differences are statistically significant (Tables 5, 7 and 9). However, when considered more profoundly and in a broader context, the diagnosis seems too simplistic. First of all, it has to be taken into account that both teachers operated in significantly different educational settings. Polish universities are quite traditional and impose on their students a system of considerable control (participation in class is obligatory; course completion depends on the quality of the task[s] submitted). In German higher education institutions, which value learner autonomy, course credit is based on exam results, class participation being treated much more leniently than in Poland. All this considered, the German teacher has to rely on intrinsic motivation only, whereas in Poland external motivators can be used if needed. It was not necessarily the case of the Krakow group, who were motivated and had a clear sense of direction (Figure 5; Table 4). But with the Freiburg students complaining about the low interest of the task (post-mind mapping survey) and their lack of understanding of the overall aim of the exchange (Figure 5; Table 4), it has to be said that the German teacher could not do much to influence the level of engagement of his students.

As for the overall objective of the exchange being unclear to the German students, one may argue that this was, in fact, a failure on the part of their teacher. Yet, the answer here, again, is much more complex than it appears. It is true that the Polish objective – raising the students' awareness of the importance of *politische Bildung* – had not been discussed in the German class until the results of the post-mind mapping survey were known. However, it is also the case that until this critical incident both teachers operated on the false assumption of the-same-objective. In this sense the exchange was flawed from its very origin. When, during the design phase, the teachers talked about the theme of the telecollaboration – ICC / German; *politische Bildung* / Polish – they always assumed, based on Byram (2008), that these two were related. And on the general level, they were; in details, however, the understanding of the two teachers was different. The Freiburg focus was more on the communication between cultures, preferably in the course of telecollaborative language learning and Polish students were seen as exchange partners; Krakow, in turn, concentrated more on civic duties, hoping for role modelling on the German side.

In addition to these mismatched objectives, there is also a question of the lack of balance in the telecollaborative exchange described here, which needs addressing. Two manifestations of this lack of equality between the telecollaborating parties were already mentioned above. There was more external (institutional, teacher) pressure on the Polish students to carry out the tasks; in the German class external motivators were not an option. Moreover, while the German students were supposed to look at their telecollaborators as equals (exchange partners), the Krakow teacher put her group in a situation – the role-model setting – in which the students had to receive more than they were expected to give. These two inequalities were reinforced by another lack of balance: the one in the cooperation between the two teachers. The Polish tutor turned out to be more effective in carrying out her agenda, whereas the German teacher

followed the lead. This resulted in the German students dealing – excessively, from their perspective – with the *politische Bildung* issues, which were of low interest and unclear purpose to them. This also, and considerably, affected the quality of teaching presence. It was, in fact, the Polish teacher – especially through her task design and her instructions – who was PRESENT in both classrooms. No wonder, this presence was felt as weak on the German side, with the Krakow instructor not physically present and the Freiburg tutor only moderately engaged in moderating activities that only partly fulfilled his own objectives. It takes two to tango, as an old adage has it, which proved true for the exchange described, both on the level of students and their teachers. And the most important observation that follows is that it is impossible to give a good performance if the partners are not equals, in their roles or their involvement.

Finally, there is word to be said for exchanges with a very tight focus – or very tight foci, as was the case of the telecollaboration between Freiburg and Krakow. When strictly following one's own agenda it is very easy to neglect what is the core of intercultural exchanges online: raising the awareness of culture, of one's own and of the other, and going beyond stereotypes. Such awareness raising is best done in settings offering opportunities for smooth, truly bilateral communication. This is a very important lesson to be learned from the exchange described, by both the German and the Polish teachers. Based on their students, perceptions of how misconceptions and stereotypes were diagnosed and dealt with (Figure 7; Tables 8, 9) – and here, unlike on many other points, both groups agree – neither of the teachers addressed the issue in a way that could be called outstanding. It is a considerable drawback, especially in the light of Helm and Guth's (2010) observation: if the culture-related – or context-related, as was the case of the current exchange – problems are not handled carefully by the teacher(s), stereotypes are reinforced rather than dealt with in telecollaboration.

5. Conclusions

Telecollaboration is a learning mode offering promising opportunities for language learning and – increasingly – language teacher training. Yet, the potential, to be taken full advantage of, has to rest on balance between the collaborating parties: balance of agendas, of involvement, of expectations; and of teaching presence. This can be achieved on condition that (i) the design process is truly collaborative, with both (all) teachers fully supportive of the common agenda; (ii) the telecollaborating parties are on the same page – cognitively and affectively – and these two kinds of synchronicity are continuously monitored by the teacher; (iii) the teachers and the groups are a match for each other in terms of engagement; and (iv) teaching presence on both sides is both strong and flexible enough, to keep the exchange on track as well as to be able to apply remedial action if needed. These are the teaching implications learned from the failure of the intercultural online exchange described in this article.

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Notes

[1] Descriptions of a large number of tasks used in the past telecollaborative exchanges can be found here: http://uni-collaboration.eu/?q=tasks_list.

[2] http://www.cbos.pl/SPISKOM.POL/2014/K_029_14.PDF

[3] <http://www.isp.org.pl/files/16591128070516130001227604007.pdf>

Research & development paper

Developing CALL for heritage languages: The 7 Keys of the Dragon

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Abstract

In this article we present an interactive extensible software, *The 7 Keys of the Dragon*, for the teaching/learning of Albanian and Russian to students that attend primary and secondary education in Greece with the respective languages as their heritage languages. We address the key challenges we encountered during the conceptualization phase of the project development and the specific design choices we implemented in order to accommodate them. Drawing on recent research on the role of Computer-Assisted Language Learning (CALL) applications for young bilingual populations, we aimed at creating a user friendly environment with a clear pedagogical orientation. Furthermore, given that games in language learning are associated with intrinsic motivation and meaningful exposure to the target language, we have integrated a fairy-tale background narrative, a game-inspired reward system, and two cartoon-like assistant characters to stimulate the user's involvement in the learning tasks. Five chapters for each target language were created, each comprising a text, a variety of scaffolding material and quizzes. The software is designed to provide real-time automatic correction of quizzes and allow for easy expansion with additional quizzes and texts. A separate application for teachers facilitates essay correction and commenting on the students' language learning progress and achievements.

Keywords: Online language learning, heritage languages, Russian, Albanian, focus-form activities.

1. Introduction and motivation

The programme 'Education of Immigrant and Repatriate Students' was designed to improve the education of students of immigrant or repatriate background in order to lower school failure and dropout rates by offering equal learning opportunities to these students. A particular action of this programme, Action 5, aimed at the reinforcement of the mother tongue, or *heritage language* (HL) (1), as a means to attain the social integration of these students, who otherwise lack the opportunity to maintain their mother language outside their family environment. For this purpose, a pilot programme of mother tongue language classes for Albanian and Russian were organised in several schools in Thessaloniki and Athens. These two languages were chosen as they had the largest number of speakers in the target population.

One of the central tasks of Action 5 was to bring together linguists, language education and bilingualism specialists, Albanian/Russian-speaking writers-editors of educational materials, software engineers and graphic designers, in order to organize the structure and the syllabus of the pilot language classes and, of course, to produce the appropriate language material that would best meet and accommodate the learning needs of the student population at hand. The ultimate goal was to present a comprehensive and feasible proposal for teaching HLs that could be easily implemented in the Greek education system. In this article, we present the methodology followed for the construction of the electronic language learning environment with emphasis on the pedagogical, linguistic and technical challenges we met which, ultimately, led to the incorporation of certain innovative features in the design of the environment.

The language lessons began in 2011 and were completed at the end of the school year in 2013. Due to restrictions imposed by the operating conditions of the cooperating schools and the constitutional status of the Project, the language courses were adjoined as an extra-curriculum activity ('additive approach' to learning, see Banks, 1989), and were allotted only a two-hour slot per week at the end of the school day. The courses took place just after the end of the morning classes, with a half-hour break between them. Our students were between 9-13 years old, they came from different backgrounds and had various language proficiency levels ranging from no or limited knowledge of the target language to advanced spoken ability. However, all exhibited limited or non-existent writing skills. The students were grouped in classes for beginners or advanced learners, according to their scores in a language placement test they took at the beginning of the school year.

With respect to the language instructors, the ones recruited for the Albanian and Russian language courses were keen on using traditional teaching methods and had limited or no efficiency in computer-assisted language teaching skills. The teachers' poor digital literacy rendered them suspicious or unwilling to integrate Computer Assisted Language Learning (henceforth CALL) into the language classroom thus putting the whole project at risk. This was a major problem which was tackled via two training seminars (3 hours each) on CALL and, especially, on the administrator/teacher application structure of the 7Keys.

Given the pilot nature of the endeavour and the specific conditions under which the classes had to be structured, we decided that a *blended learning model* (Neumeier, 2005; Motteram & Sharma, 2009) would be the most fitting strategy to organize our courses since it integrates components from both face-to-face and CALL into a single language learning and teaching environment. According to Yager & Roy (1993), computers should be integrated in a classroom setting with the rest of the learning resources and should be treated as one more of the possible ways of accessing the learning materials. In-class and computer-assisted modes of teaching and learning are expected, therefore, to curtail differences at language proficiency levels such as the ones mentioned above. More importantly, blended learning constitutes an ideal strategy for enhancing the creation of networks among the students within and outside the class, thus, paving the way for collaborative work and assistive learning.

In the two-year development phase of the pilot project, an e-learning system with game features, dubbed *The 7 Keys of the Dragon* (henceforth 7Keys), was developed in order to better organize the HL learning lessons, enhance the form-focused practice and enrich the teacher-student interaction outside the time and space limits of the class. A welcome result of an e-learning environment such as the 7Keys is that it allows the student to engage in a fruitful and enjoyable process of language learning in the comfort of his/her own personal environment (e.g. at home), at his/her own pace and, more importantly, with a focus on his/her own language needs. Moreover, it offers the

potential to language instructors to keep control of their classroom and constantly adapt the e-learning materials to their students' particular needs.

The remainder of this article is organised as follows: we review the literature on CALL with emphasis on materials and tools that were developed for HL learning, especially, those that were designed for young populations, and report on those characteristics that inspired us in the development of the 7Keys. Then we move on to presenting the key objectives we aimed at and the ways in which these were implemented in the e-learning environment. We also discuss issues pertaining to the architecture of the 7Keys' main components, the type and focus of the language learning materials and the pedagogical and language learning framework that served as its basis. The final section concludes this article.

2. Heritage languages and CALL

In this section we provide a short review of the literature on HL and CALL with emphasis on the young learner. We commence by describing the main characteristics of the HL learners that distinguish them from native and second (L2)/foreign language speakers (§2.1). We introduce the contemporary CALL ((a)synchronous) tools used in language learning classes addressed to young learners (§2.2) and also report on the positive effects of its use in HL classes based on the results of previous studies on the subject (§2.3). Furthermore, we discuss the language instructors' role in the design and assessment of CALL materials and their stance regarding the integration of CALL applications in the teaching practice (§2.4). This section concludes with an enumeration of the key considerations we had to work on in the development phase of the 7Keys, as these were dictated by current research on the design and development of CALL materials and of course by the specific learning needs of the population in question, i.e. the young learners of Albanian and Russian (§2.5).

2.1. The heritage language learner

Due to the heterogeneity of the heritage language speakers, it is hard to identify the basic properties of this group (2). Based on Valdés (2000), Benmamoun, Montrul & Polinsky (2013b: 260) heritage speakers can be defined as "asymmetrical bilinguals who learned language X – the 'heritage language' – as an L1 in childhood, but who, as adults, are dominant in a different language". Heritage languages are usually spoken by immigrant communities although the notion may also refer to colonial languages, indigenous languages, languages that may have or lack an official status in the areas, territories or communities in which they are spoken. Under a broader definition, it also pertains to a cultural or ancestral association of a population with a given language without presupposing bilingualism (see Fishman, 2001, 2006; Cummins, 2005).

It is not uncommon for heritage speakers to lack the full spectrum of language skills (e.g., their proficiency in reading and writing rarely extends beyond the elementary levels of literacy) and, therefore, to exhibit poor or no academic proficiency. For instance, Roca (2000) reports that heritage speakers of Spanish fall short on literacy skills and exhibit a rather confined vocabulary and use of registers. This is anticipated given that the HL speakers' contact with the language community is limited or restricted to their family and community members, whereas education in their heritage language is either fragmentary (Saturday/Sunday schools or after-school programmes notwithstanding) or absent (Campbell & Rosenthal, 2000; Kagan & Dillon, 2001). They do exhibit, however, good or native-like pronunciation and aural competence.

To sum up, HL speakers' grammatical and lexical competence clearly identifies them as a distinct group from native and L2/foreign language speakers.

2.2. CALL and the young learner

Since its first appearance in the 1980s, CALL has made its way through the language learning classes. However, the bulk of CALL research is still either unspecified as for the target age or is addressed to adult populations (Ramirez Verdugo & Alonso Belmonte, 2007: 88). It was only until recently that special attention was given to young learners' language learning needs (3).

A growing number of publications explore how various state-of-the-art technologies can foster language development in younger learners (e.g., Lewis, 2004; Parker, 2007; Pim, 2013). Pim (2013), for instance, offers an insightful presentation of present day e-tools, interactive multimedia tools, digital games, apps and software tools – designed to be used in laptops, tablets and smart phones – that improve the language learning experience for both children and adults. Asynchronous tools like email, wiki writing, blogging, etc. (Terrell, 2011; Wang & Vásquez, 2012) and synchronous environments such as video-conferencing (e.g., Skype), social networks (e.g., Facebook), interaction through online virtual worlds, e.g. Second Life (<http://secondlife.com>), Active Worlds (<http://www.activeworlds.com>), among others, have been effectively integrated in language learning methodologies giving to learners the opportunity to develop their reading and writing skills (Hew & Cheung, 2010; Zheng, Young, Wagner & Brewer, 2009).

The contribution of ICALL to foreign language teaching and learning is significant, especially with respect to the development of young learners' language skills or their acquisition of grammar. An instructive example of focused training is the CHELSEA and CRYSTAL (4) computer-training platform that offers individualized and self-paced acquisition of English phonology by pre-schoolers with Chinese as a first language. The platform makes use of automatic speech recognition and text-to-audiovisual-speech tools in order to help users detect the non-target pronunciations of English in their speech and correct them with practice.

Finally, digital games have a special place in the field because they attract the interest and trigger the excitement of younger users (Peterson, 2010; Cornillie, Thorne & Desmet, 2012). Texts and the accompanying language materials are complemented by a captivating fictional narrative and they are appropriately enriched with animations, fascinating characters or avatars, video and audio effects and other virtual experiences that stimulate interaction with peers and foster a spirit of constructive competition among them (Purushotma, Thorne & Wheatley, 2009). Gee & Hayes (2011) claim that with the advent of new forms of digital media, children are increasingly drawn towards video games, social media, and alternative ways of learning.

2.3. CALL in the heritage language classroom

Language maintenance and preservation, especially among young HL speakers, is pivotal and there have been several efforts for the development of more effective and innovative strategies for the revitalization and the teaching/learning of HLs, both within and outside the formal system of education (5). A growing number of studies, for instance, have examined how technology can be used to record and preserve indigenous languages for revitalization purposes (Buszard-Welcher, 2001; Warschauer, 2003; Villa, 2002; Ward, 2004). However, not as much attention has been given in this respect to HL learners in primary and secondary education (Lee, 2006). How the languages of immigrant or minority communities are approached reflects power structures, political systems and basic philosophies in society which influence the language policy of a state or a nation (Baker & Prys Jones, 1998). The language policy in turn affects the curriculum in schools and *if* and *how* heritage languages are taught. For this reason, CALL in relation to heritage languages is often the concern of immigrant

and minority communities and/or the result of applications by individual second language teachers, seeking a way to make their lessons more motivating and effective (Aravossitas, 2010).

The benefits of CALL for HL teaching are explored in a number of studies. For instance, Meskill & Anthony's (2008) research of Russian heritage learners in post-secondary foreign language courses has shown that *computer mediated communication* (CMC) (e.g., email, instant messaging, blogs, chatrooms, gaming, and online instructional forums) had a positive effect on academic literacy development. Furthermore, CMC tools are fruitfully implemented in comparative studies on the language behaviour and development of L2 and HL learners. Blake & Zyzik (2003), for instance, used a synchronous CMC environment (online connection via the university's RTA chat programme) in a paired HL-to-L2 learner task to observe the learners' linguistic behaviour (miscommunications, negotiations, etc.) and explore whether the interaction via the CMC tools is mutually beneficiary for both groups of speakers or not. In a similar vein, Tallon (2009) examined whether CMC (in the form of electronic, asynchronous discussions on BlackBoard) had an effect on foreign language anxiety in HL and L2 learners of Spanish and found out that the levels of anxiety were much lower in the HL learners than in the L2 learners.

More importantly, however, there are a few HL studies addressed to young learners. The project RU_CALL (Katushemererwe & Nerbonne, 2013) is an electronic language learning environment that enables young learners with mother tongue deficiencies to enhance their knowledge of grammar and acquire writing skills in Runyakitara (a Bantu language group spoken in western Uganda). The tool focuses on the complex system of nominal morphology (e.g., declension classes) and employs natural language processing in order to generate a large base of exercise materials (vocabulary, grammar, drills, etc.) which requires limited tuning intervention by the teachers.

Another project that aims at the young speakers' preservation of bilingualism, with emphasis on minority languages, is the Fabula software package (Edwards, Pemberton, Knight & Monaghan, 2002). The main objective of this multidisciplinary, multinational project was the construction of "an easy-to-use software environment for making and viewing interactive multimedia bilingual books" (Edwards *et al.* 2002: 60). Fabula fosters only European "languages of lesser diffusion", that is, languages that are typologically not too distant (e.g., Friesian/Dutch, Catalan/Spanish). One of the major innovations of this project is that both teachers and children actively participated in the construction of the text and the graphic material contained in the storybook, which brings us to our next topic: the use of CALL tools by the teachers and their integration in the teaching practice.

2.4. The role of the teacher in CALL

With respect to the language instructors, it is not uncommon in the CALL literature to encounter teachers who are unwilling to integrate CALL into the language classroom (Lam, 2000; DelliCarpini, 2012; Hedayati & Marandi, 2014, among others). Research on the topic has identified several reasons for teachers' reluctance to use CALL, among which are the following: low level of digital literacy, curricular and administrative restrictions, and the teachers' beliefs about the effectiveness of instructional technology. It is also often the case that instructors feel overwhelmed by the abundance of the tools and the way they can implement technology into their classes (see Stanley, 2013 and references therein). Recent research, however, emphasizes how important the teachers' contribution to CALL is, not only as users but also as developers and evaluators of CALL materials (Villada, 2009). According to Amaral & Meurers (2011), instructors endorse the idea of students using computers to practice receptive skills, reinforce the

acquisition of language forms, propose remedial work, and raise linguistic awareness, which paves the way for their active involvement in the design, use and assessment of CALL materials.

2.5. Developing CALL for the Albanian/Russian heritage language classroom: key considerations

Guidelines for developing and/or assessing effective CALL materials can be found extensively in the literature with major contributions in the field made by Chapelle (2001), Hémard (2003) and Hubbard (2006). Despite their methodological differences on the research focus, these studies concur that a sound pedagogical context and a set of well-specified usability guidelines must be employed in the design of electronic environments for language learning. The common ground in all these studies is the concession that a CALL tool can qualify as effective only if it is designed to best suit both the instructors' and the learners' needs. In a similar vein, Villada (2009) argues in favour of an interpretivist approach to the evaluation of CALL resources for *early foreign language learning*, according to which the perspectives of the developer, the teacher and the students in the development and evaluation of CALL are equally important (Villada 2009: 385). Finally, Cumbreño Espada *et al.* (2006: 48) call attention to Haugland's (1997) scale for determining whether an application addressed to young learners actually fosters learning. The scale applies the following criteria: adaptation to the learner's age, ability of the child to pay attention and to be able to control the process, clear instructions, progress of difficulty levels, self-access and work possibilities for the child, non-violent content, orientation on learning process, capability of programme for real world modelling, technical features of the programme, and capability of the programme to undergo adaptations and developments.

Drawing on the existing CALL literature and research, we decided to incorporate tools and features that are broadly available for electronic language learning purposes into a *single* environment that could support the linguistic needs of young Albanian and Russian HL learners and would be appealing, yet usable by both learners and teachers. For this purpose, in the conceptualization phase of the project development, we worked towards defining the key qualities that 7Keys should exhibit in terms of both its content and its architectural design. More specifically, our main objectives were:

- To develop a system that considers both instructors and learners as users
- To engage instructors in the design and development of CALL materials and provide them with the opportunity to tailor language activities to their students' needs
- To respond to our learners' specific linguistic needs and raise their language awareness
- To accommodate diverse language proficiency levels
- To stimulate both student-teacher interaction and interaction among peers
- To offer students control over their learning
- To provide meaningful feedback
- To intrigue motivation
- To develop a usable and user-friendly environment for all users

In the following two sections, we describe in detail the architecture of the 7Keys and its main applications and spell out the technical details of the implementation (§3). Furthermore, we elaborate on the pedagogical and linguistic framework that guided us in the design and construction of the language materials in the 7Keys (§4).

3. The 7Keys environment: The architecture

In this section we describe the 7Keys system, both in terms of user structure and organisation of learning materials. We also present the features and capabilities of the various subsystems of the environment, and expound on the technologies utilized.

3.1. User structure

7Keys features three tiers of users that form a pyramidal hierarchy. Learners form the bottom tier and are organised into groups paralleling their assignation into school classes. Each class is presided over by a teacher, who will usually be the learners' real life teacher in the HL classes. Teachers form the middle tier of the pyramid and are responsible for managing learners in their classroom, commenting on their progress, answering their questions using the inbuilt messaging system, and grading their essays. At the top of the pyramid is a single administrator, who can manage teachers' accounts, issue general announcements, upload new learning materials, or modify the existing ones. The administrator may also double as a teacher.

Since the 7Keys was conceived as a complement to classroom HL teaching, our main considerations when designing its user structure were the following: First, we wanted to keep as much as possible with the existing structure of the HL classes, so as to provide learners with the feeling that the 7Keys is an extension of the class, and also hoping that some of the excitement incited by the game-like mechanics of the 7Keys will rub off onto the classroom courses. Second, we wanted to provide de-centralized user management, so that each teacher is responsible only for their own class, and the administrator is responsible only for the teachers. In this way, future expansion to include more classes is easy, as each class can function as an almost independent cluster. The administrator needs only to create a new teacher account, and the new teacher can then work at building his/her new class. Lastly, we felt that all the learning materials had to be controlled centrally, by the administrator, who must ensure that new texts, translations, and quizzes contain no errors and are culturally appropriate by cultivating a deeper understanding between the two nations.

3.2. The learner application

The learner application is a game-like environment, with fairy-tale graphics, animations, sounds and an introductory video sequence aimed at immersing the learner in a story that progresses alongside the learner's language skills. Drawing inspiration from modern games, the 7Keys promotes motivation using a reward mechanism for certain quiz-related achievements, while a separate point system marks the learner's progress towards a goal, that is, the game's finale, which is concluded with a second video sequence.



Figure 1. The game's start.



Figure 2. The game's finale.

The learning materials are organised into chapters. Each chapter is based on a text, is aimed at a specific learner level, and includes the text and a substantial number of quizzes. Quizzes are organised in three groups according to focus (see §4.1), with each group further being divided into three levels of difficulty (see §4.2). In this way, 7Keys can accommodate diverse language proficiency levels, as each learner (under the teacher's guidance) can choose the texts and difficulty levels in each focus area that are most suitable for him/her.

Navigation is designed to be intuitive and clear. Navigation buttons are marked by universally recognised symbols, such as an ear for listening or a left-pointing arrow for back. All levels of the structure of the learning materials (texts, foci, levels, and quizzes) are represented by clickable in-game objects, providing intuitive navigation forward. A button that takes the user back to the main menu is always available. All navigation components are highlighted on mouse-over, marking them clearly as such. Pop-up tooltips provide an explanation of a button's function on prolonged mouse-over.

Outside the main learning sequence of texts and quizzes, 7Keys provides four additional features:

- The *profile* page (see §4.3).
- The *portfolio* (see §4.3).
- The *magazine*, dubbed the "Wizard's Magazine", is a selection of learners' essays, viewable to all students of all classes. A teacher may publish an essay in the magazine after its author has placed it in their portfolio. The magazine was included to provide inspiration and offer an extra incentive.
- The *crystal ball*, an inbuilt communication system between the learner and the teacher.

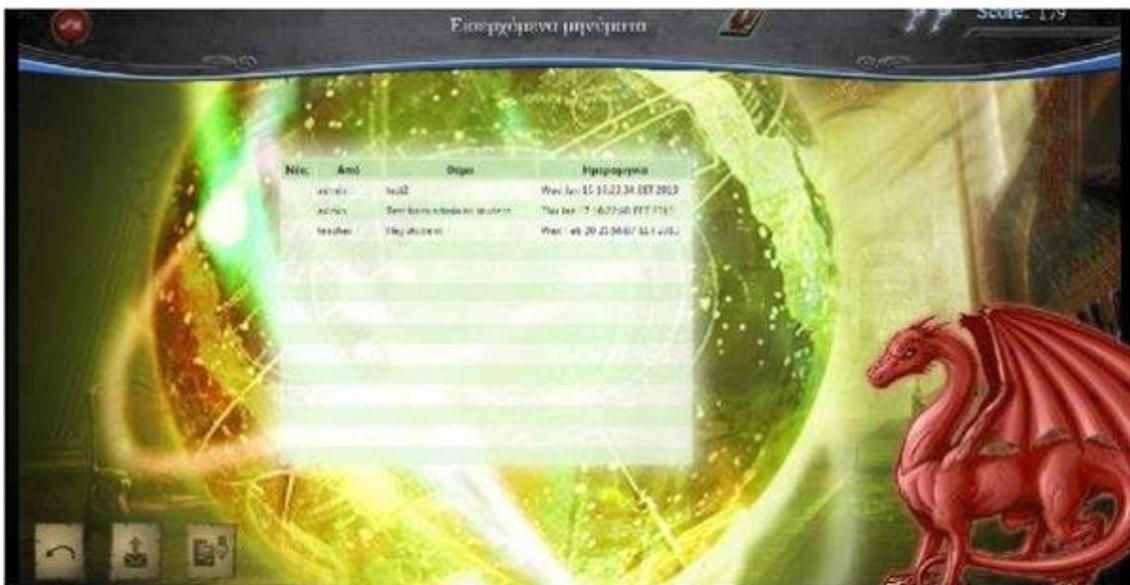


Figure 3. The inbuilt communication system.

3.3. The teacher/administrator application

The applications created for the teachers and the administrator provide these types of users with all necessary tools to fulfil their roles. The administrator application expands upon the functionalities of the teacher application to provide tools for updating learning material and manage teacher accounts. User management enables teachers to create and delete learner accounts in their own classroom. The administrator can create learner accounts and assign them to any teacher, and can also create or delete teacher accounts.

A learning materials tool gives the teacher and administrators access to the texts that form the core of the curriculum. Similarly, the quiz overview tool provides access to the quizzes that accompany each text. An inbuilt filter-driven search engine enables the teacher to locate desired quizzes easily, filtering for type, difficulty level or corresponding text.

The learners' answers tool provides teachers with access to quizzes completed by students in their class. The teacher may grade essays (which, as mentioned, are the only type of quiz not automatically graded by the programme), give feedback upon any type of quiz, publish essays in the magazine and review each learner's progress.

A messaging system, analogous to the one built in the learners' application, is also included, with settings for both one-on-one communication and group announcements. A final tool provides both the teacher and the administrator with access to essays already published on the magazine.

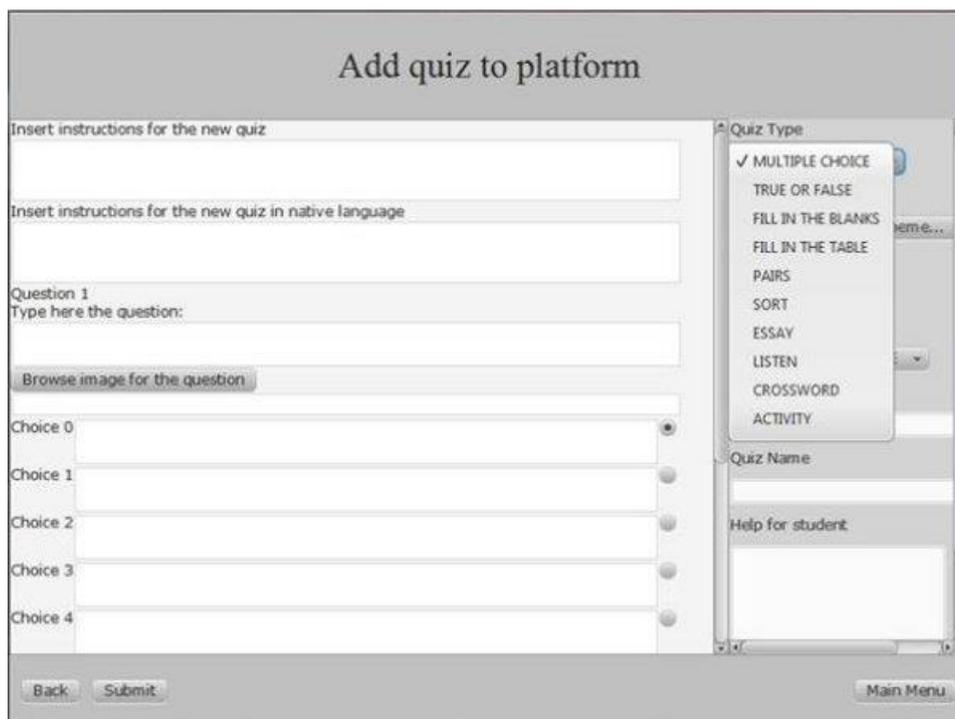


Figure 4. The teacher/administrator quiz tool.

3.4. Technical implementation

The system is designed with a client/server architecture. A different client was created for each of the three types of users. All clients are served by a single server application. The server application implements all necessary functionalities for data storage and retrieval. All data is stored centrally in one database instance, which can be accessed directly only by the server application. The server then exposes the appropriate methods as web services in order for the clients to communicate with it. Since no data is stored locally, this allows users to log in from any device on which the client has been installed and have access to all data and progress. As new learning materials are added by the administrator, all the users have instantaneous access to them.

Technically, the server application is a custom web application written in the Java programming language. Java forms a mature and well-tested technology and its use minimized development risks. Certain Java Enterprise Edition (Java EE) features were used, such as Stateless Session Beans. Consequently, the application should only be deployed on a Java EE compatible server. Specifically, the system was developed and tested only on the Glassfish application server. Java Database Connectivity (JDBC) was utilized for accessing the database. All the server functionalities are available to the clients via web services over the Simple Object Access Protocol (SOAP).

The clients were implemented as three executable standalone applications, namely the administrator's, teacher's and student's applications. They make use of the server provided web services over SOAP in order to fetch and store data from/to the database. Moreover, a centralized custom authentication system was implemented in order to provide a minimum level of security. The authentication system is also used for authorization, since each role can authenticate only to the corresponding application.

The clients' development was also based on the Java technology. For the presentation layer of the applications, the JavaFX 2.0 framework was used. JavaFX supported the development of rich interfaces that would be able to be incorporated to web pages with minimum effort if required. All clients are distributed in a package that includes the Java

Runtime Environment (JRE). This negates the need for the hosting device to have the Java JRE installed, and avoids incompatibilities that may arise due to different versions of the JRE.

4. The 7Keys environment: the language materials

In this section we present the solutions we provided to issues pertaining to the learners' specific language needs, which dictated the pedagogical and language learning framework the materials were constructed on (§4.1), the learners' diverse language profile (§4.2) and their option to have control over their learning (§4.3).

4.1. Accommodating the learners' language needs

As mentioned above, one of the main objectives of our endeavour was to respond to our target learners' linguistic needs and to improve their academic proficiency in the heritage language. In order to focus on academic language proficiency, we decided to follow Cummins' (2001) *Framework for academic expertise*, which was designed specifically for second language learners. An immediate result of this decision was that we did not follow the traditional classification of language skills as productive or receptive skills (i.e., reading, writing, listening and speaking) but Cummins' classification of language proficiency in relation to L2 learners, whereby:

- *Conversational fluency* represents the ability to carry on a conversation in face-to-face situations.
- *Discrete language skills* reflect specific phonological, literacy and grammatical knowledge.
- *Academic language proficiency* includes knowledge of less frequent vocabulary as well as the ability to interpret and produce complex written language.

Activities were designed according to three distinct language foci: focus on meaning, focus on language and focus on use. Activities that focus on meaning are geared towards enhancing text comprehension and developing critical literacy. Activities that focus on use serve to support students' creativity in language use. Hence, in the 7Keys environment these types of activities are mostly tasks or projects – often with a strong identity orientation – designed to be implemented collaboratively in the language classroom (e.g., organizing a summer holiday in Albania in the form of a webquest).

Activities that *focus on language* are designed to cultivate an awareness and critical analysis of language forms and uses and were given special attention. More specifically, we designed drills and exercises that aimed at enhancing the students' grammatical knowledge, such as their ability to grammatically identify a given form or produce another one with the appropriate grammatical characteristics (e.g., case, number, gender, aspect, tense). However, activities went beyond the formal knowledge of language, focusing on the critical analysis and awareness of the similarities and differences between the two languages in the bilingual students' repertoire. The content of these activities was determined by: (a) the results of a comparative study that examined the basic grammatical properties of the ambient language with the languages in question (i.e., Albanian-Greek and Russian-Greek) conducted by the team of linguists (Revithiadou & Spyropoulos, 2013), and (b) the students' own errors, as revealed by the placement tests. To enhance the students' assistance, a grammar book (with easy to understand grammatical rules, special reference of language-transfer phenomena, comparative tables with the similarities-differences of the Greek and Albanian/Russian grammatical structures and illustrative examples) was written for each language and was incorporated in the environment.

In Fig. 5, we present an informative example from an activity that aims at teaching the intonation pattern of *yes-no* questions in Russian, a topic that both the comparative analysis and the placement tests suggested that requires special attention. The reason is that in Russian the high-low contour of the question extends to the whole word that is the focus of the question, whereas in Greek, the focus word is pronounced with a low tone and the high-low contour of the question is realized towards the end of the utterance. In the 7Keys, students listen to Russian questions with the use of hypermedia and they are asked to decide if the intonational pattern they hear is correct or not. The source of confusion is that some questions are rendered with the Greek contour instead of the correct Russian one. This type of activity assists students, apart from mere practice, to develop a critical analysis of the language forms of their respective language.

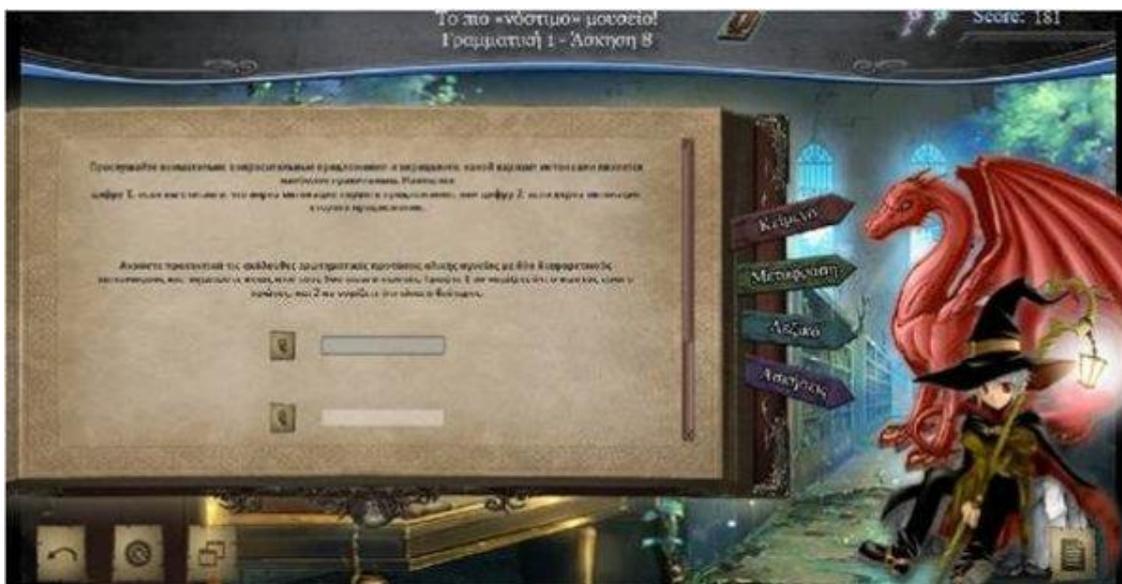


Figure 5. Example of an activity on the intonation of *yes-no* questions in Russian.

With respect to the typology of the activities, we opted for drill and practice activities (true/false, multiple choice, fill-in-the-blanks, fill-in-the-table, sorting, pairing, crosswords) for the focus on language and meaning activities, and essays and collaborative tasks/projects for activities that focused on language use. This decision was in agreement with the blended-learning rationale we adopted for the e-learning environment. Students could practice language in a self-access mode more easily when working with drill-based activities without, however, missing out on the opportunity to work cooperatively by participating in challenging tasks in the context of the language learning classroom.

Acknowledging the importance of feedback (see Murphy, 2007 and discussion within), we contemplated upon the form it should take and came up with the solution that all quizzes and drills will be automatically graded by the programme, whereas essays will be sent via the inbuilt communication system to the teacher for grading and personalized feedback. Users receive positive feedback in a friendly and encouraging manner by the wizard assistant; directive feedback is also offered in the form of pop-up hints or prompts that direct the user to the relevant chapters of the grammar book for consultation.

4.2. Accommodating the different language proficiency levels

A shared property of both Russian and Albanian HL learners, who constituted the target group of the language course intervention, was their diverse language proficiency levels. In order to tackle this problem, we constructed texts and activities that ranged

from A1-B1 (for Russian)/B2 (for Albanian) proficiency levels and categorized them by level of difficulty; a gem of different colour was used to signify each level of difficulty (green gem: beginners, yellow gem: intermediate, red gem: advanced).

During the main learning sequence of the 7Keys, the learner first chooses a text, colour coded for language level. Alongside the text, the learner can opt to use various scaffolding features according to his/her language needs. More specifically, s/he can read a translation in Greek or consult a glossary of selected words that appear in the text and may be new for a learner of that level. The learner may also listen to a narration of the text by a native speaker, having the corresponding sentence highlighted, or not, or even having the whole text turn invisible for the duration of the narration, allowing the learner to focus on listening rather than reading. By clicking on any part of the text the learner can move the playback to that point, allowing him/her to listen to a challenging phrase repeatedly, or to skip those that have already been mastered.

After reading the text, the learner proceeds to a list of quizzes, choosing the focus and difficulty desired. The quiz screen has an option for full or half screen. In half screen the other half can show the original text, the Greek translation or the glossary. This feature mimics textbook quizzes, where a learner may flip a couple of pages back to take a look at the text, while completing a quiz. Each quiz screen also has an area reserved for teacher comments, which the teacher may fill out after reviewing a learner's answers, using their own application.



Figure 6. Example of text "From the diary of a tree" and scaffolding features.

4.3. Student's control over learning.

Acknowledging the importance of allowing the student to have a sense of control over his/her learning experience (Little, 1991) and also of cultivating a spirit of competition and achievement, we developed the Profile and Portfolio pages. In the Profile the student can keep track of his/her performance on the different language foci activities. A progress bar was assigned for each type of focus, where the size of the filled portion shows the total amount of the user's progress. We also integrated a system of award badges for excellence in specific achievements. Each activity is associated with a different badge. For instance, if a student achieves a perfect score in a multiple choice quiz, s/he is awarded the badge "Orator: Invincible in essay writing!", until another user

gets a higher score on the same activity. Finally, the student can upload the activities that s/he likes or show excellence or creativity on the portfolio page and share them with his/her fellow students.

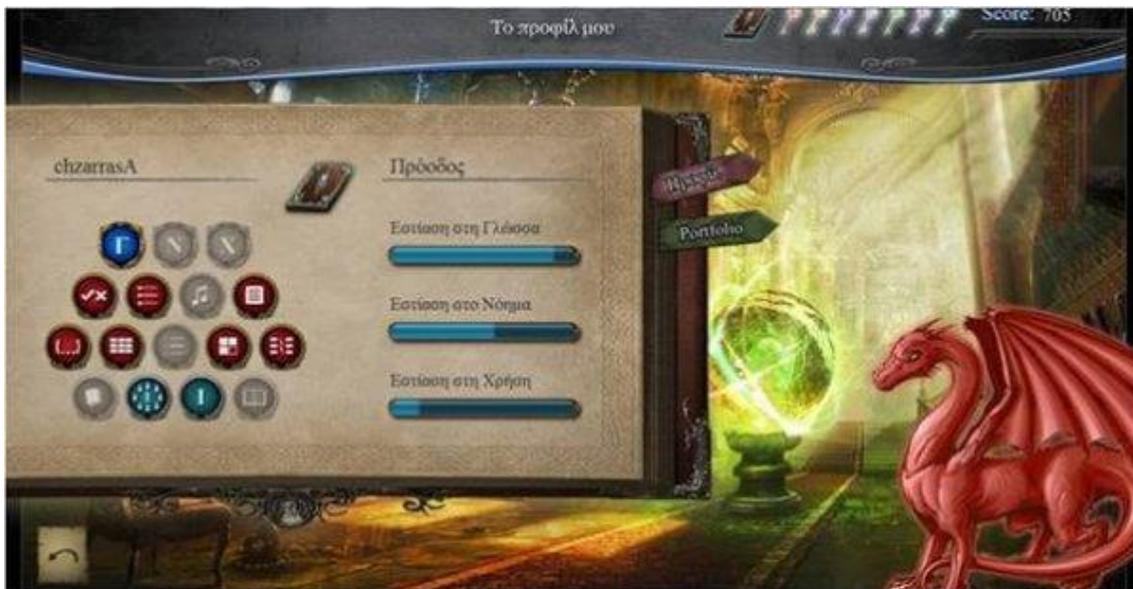


Figure 7. The student's Profile (progress bars and award badges) and Portfolio.

5. Conclusions

This study has presented a CALL system for young HL learners of Albanian and Russian, with an elaborate review of its (a) architecture and design, (b) the technical details of its implementation, and (c) the rationale that dictated the construction and layout of the language materials. Our main objective has been to provide a digital learning environment that enables learners to enhance their grammatical skills and language awareness. Unfortunately, due to the pilot nature of the Project under the auspices of which the 7Keys was developed, and the time limitations imposed by it, we were not able to evaluate the effectiveness of the tool. However, it is in our future plans to commence an evaluation of the 7Keys' content and usability features. Think-aloud protocols and field-research could unveil the learners' and teachers' perspectives on these issues and provide useful feedback for improving both the materials and the various functions. Towards this direction, research conducted on learners that make systematic use of the 7Keys in class or at home with control groups that do not could prove quite informative as well.

Future directions of this research might be to extend the use of hypermedia in both texts and drills, to include more chapters for higher language proficiency speakers and, hopefully, to integrate a Natural Language Processing tool for at least some pivotal grammatical phenomena the acquisition of which has been proven challenging for this group of HL learners.

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Notes

[1] See §2 for a definition of the term.

[2] See, for example, Campbell & Rosenthal (2000), Draper & Hicks (2000), Fishman (2001, 2006), Van Deusen-Scholl (2003), Carreira (2004), de Bot & Gorter (2005), Polinsky & Kagan (2007), Hornberger & Wang (2008), He (2010), Carreira & Kagan (2011), Montrul & Polinsky (2011), Beaudrie & Fairclough (2012), Benmamoun, Montrul & Polinsky (2010, 2013a, b), King & Ennser-Kananen (2013), and references cited therein. For an informed bibliography on heritage languages, the interested reader is referred to Aravossitas & Trifonas (2014) and Polinsky (2011).

[3] See Kennedy (1988) on the learning differences between adults and young learners.

[4] <http://www.cuhk.edu.hk/clear/tdg/0508/0508-10.html> (*Scientific Directors*: Prof. Helen Meng and Dr. Pauline Lee).

[5] Some representative literature of HL education and learning/teaching strategies include: Valdés (2001), Said-Mohand (2011) for Spanish; Wang (1996), Tao (2006), He & Xiao (2008) for Mandarin Chinese; Lee & Shin (2008) for Korean, among others.

Research & development paper

Exploring two teachers' engagement with their students in an online writing environment

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Abstract

Little research in the ESL context has examined the online teaching and learning activities in high schools. One main reason is the lack of appropriate theoretical framework rather than the learners or the environment. Using data from twelve high school students and two teachers from two Malaysian schools, the current study adapted Borup et al.'s framework to identify the teachers' interaction with the students while engaged in the online writing environment. Borup et al. termed the construct as teacher engagement. Findings revealed that the teacher from the urban school was actively engaged in the interactions. However, the interactions of the sub-urban teacher were limited. The implications of this study suggest that teachers who are seen as digital immigrants need to consider the use of technology. Appropriate training and a checklist will be helpful to encourage the adoption of technology by teachers.

Keywords: Online learning, teachers engagement, online community, Web 2.0 tools, social networking.

1. Introduction

Most studies of online writing exclusively focus on higher education, despite initiatives by the government to expand the use of web-based teaching and learning in high schools. A number of researchers provide the reasons behind these difficulties. According to Borup, Graham & Drysale (2014) the limited focus stems from the fact that there is a lack of theoretical framework and theoretical rationale related to high schools.

According to Kimmons (2014), research in high schools is often initiated by the bureaucratic state level or at the hidden local level and restricted by time and space, whereas research at higher education institutions is initiated by professors and has the opportunity for more innovative approaches. Another fundamental challenge is that high school students tend to be less autonomous than students in higher education and thus high school students have more difficulty in succeeding while online (Cavanaugh, Gillan, Kromrey, Hess & Blomeyer, 2004).

Nevertheless, efforts are constantly made to encourage the use of the online environment in the high school through practice and research (Kimmons, 2014) and to identify the critical component of successful online learning programmes (Rice, 2009). The recent focus of high school research was very much of teacher attributes (Information and Communication tools, pedagogical content knowledge, attitudes) and their pedagogical practices to improve the ICT facilitated instructions (Kimmons, 2014).

Teacher's attributes and pedagogical practices in the online learning environment of students in high school is considered critical as students need to fulfil examination requirements and being less autonomous than adult learners (Belair, 2012). According to Garrison, Anderson and Archer (2000) teachers are as "binding element" (p.96) as students most likely will not succeed without the teachers' close supervision. Therefore understanding the teacher's engagement with the students is essential to provide evidence-based proposals as to how best to promote teachers' engagement in the online environment.

If one agrees that the online environment influences students' learning and the teachers' engagement in turn improves the quality of learning then one would assure that a full understanding of students' learning engagement will require the examining of the teachers engagement which refers to the teachers interactions while guiding students to complete their task.

Thus, this study explores the teachers' engagement on an innovative writing platform designed by the researchers. The platform is to teach narrative writing which is an important component in the Malaysian public examination taken by Year 11 students. Writing has always been an arduous and a laborious task for Malaysian ESL learners. Ong (2013) highlighted that ESL learners frequently worry about what to say or to write, before they can even think of the language to represent their ideas. In other words, generating ideas is the first phase of second language writing, followed by the language used to represent those ideas. The deficiency of ideas coupled with lack of linguistic proficiency are definitely dominant factors contributing to the failure of students in achieving good writing skills of all ages in educational institutions (Ong, 2013). In Malaysia, the setting of this study, ESL learners are able to write but the quality of their writing remains low (Maarof, Yamal & Li 2011). Local researchers (Hiew, 2012; Noreiny et al. 2011) found that students often hand in their first draft as their final draft and fail to produce multiple drafts due to lack of time, space and motivation. As a result students are not able to achieve an acceptable writing proficiency level.

One way to get students to be interested in writing is by providing a virtual "third place" where students have the opportunity to write outside the classroom at their own pace and convenience (Jones, 2012). Students become more tolerant with their imperfect writing with the use of an online writing environment as they are able to revise, edit, delete and paste their writing easily (Minocha & Robert, 2008; Richardson, 2006) before the final essay is submitted. Besides, the importance of the use of online activities and the need for every child to be proficient in English is foregrounded in the Malaysian National Education Blueprint (2013-2025). The blueprint projects the importance of an online environment in schools in order to equip young Malaysians with the skills to face the impact of globalization.

Thus, this study explores the teachers' online interactions while the teachers are engaged in teaching students to complete their online narrative writing tasks. An in-depth understanding of teacher's online interactions is crucial for the successful implementation of pedagogical practices in an online writing environment in the Malaysian context. This study attempts to investigate, interpret and compare the online interactions in an urban and a sub-urban school in the northern region of Malaysia. The theoretical framework for this study has been adapted from Borup et al. (2014) and Garrison et al. (2000).

2. The innovative narrative writing platform

The innovative online platform is motivated by the ideas highlighted by Shulman (2005) that an effective teaching and learning activity is not about the use of technology but rather the pedagogy that can realise the potentials of the technology. This points to the

fact that the pedagogical applications and tools with certain elements of learning are more important than the constant preoccupation with the tools of technology. Educators need to know the potential pitfalls to which students frequently fall victim and need to strategize activities which are more fruitful.

In the current era, Facebook is the most popular social networking site. For this reason, Facebook has been utilised as a writing platform in this study. The teacher's Facebook environment is termed *tutor platform* in which the teacher can upload the instructions, questions, tips suggestions, dateline and model essays. The students' Facebook environment is termed *learner platform*. Students post their individual essays, interact to improve the quality of the essays and finally submit the final essays which are edited and revised essays based on teachers and students' online interactions. Teachers and students can interact in the tutor and learner platforms. The pedagogical practice in this study focused on Labov & Waletzky's (1967) narrative structure. Students are encouraged to interact and collaborate as underpinned by constructivism theory. The uniqueness of this innovative platform lies in the integration of social interactions based on social constructivism theory and Labov & Waltezky's (1967) narrative structure in the Facebook environment.

The researchers argue that, what should be the concern of the educators is how the previous pedagogical practices can be meaningful while meeting the challenges of a newer technology. Such is the evolutionary nature of the tools of technology. Even the present popular social networking tool such as Facebook will become obsolete one day. When the new social networking sites appear, the pedagogical practices and the learning theory that are suggested in this study can be considered in a newer platform.

3. Research Questions

The investigation was guided by three research questions:

1. How do the teachers' online interaction patterns fit Borup et al.'s (2014) framework?
2. What are the differences in teacher engagement by two different teachers?
3. How did the teacher engagement affect students' quality of narrative writing?

4. Theoretical perspectives

This study adapted Garrison et al.'s (2000) teaching presence and Borup et al.'s (2014) teacher engagement frameworks. As noted earlier, the theoretical framework and literature review related to online writing for secondary schools are limited. Murphy and Rodriquez-Manzares (2009) suggested that the Community of Inquiry framework by Garrison et al., which is intended to examine higher education, may be appropriate to be adapted to the secondary school online learning environment. Garrison et al.'s Community of Inquiry Model (CoI) fits ideally with constructivism theory. The model has also been employed to get a better understanding of what is missing when educators and learners are put in an online learning environment (Perry & Edward, 2005). It is an easy yet effective model to illustrate communication (Batruff & Headley, 2009). The CoI model suggests an environment for students to interact, share, receive feedback and learn together. The three important elements of the CoI model are cognitive, teaching and social presences. Cognitive presence "reflects higher order knowledge acquisition and application" (Garrison et al., 2001, p. 11) and is grounded in the critical-thinking literature" and a "focus on higher-order thinking processes" (p. 8). Teaching presence refers to "the design facilitation and direction of cognitive and social processes" (Anderson et al., p. 5) and social presence refers to "the salience of the other in interpersonal interactions" (Short, Williams & Christie 1976, p. 65). Social presence

initiates group cohesion, which deepens interactions (Henri, 1992; Garrison et al., 2000).

The three presences are interrelated and Garrison et al. have placed special importance on teaching presence as it is necessary to stabilise the cognitive and social issues in the educational environment (Garrison et al., 2000). Garrison et al.'s initial research work on teaching presence was on the online discussion boards to identify the indicators of teaching presence. They identified three indicators of teaching presence: designing and organizing, facilitating discourse and providing direct instruction. However, an online environment demands more than discussion boards. The work of Shea, Hayes and Vickers (2010) on CoI framework reported that the researchers have been more concerned about the nature and the level of the online discussion and surveys. Also, researchers rarely consider the work of the students and instructors in undergraduate settings (Toth, Amrein-Beardsley & Foulger, 2010). It appears that future research should look at the work of students and instructors instead of looking at the online discussions in the post-graduate settings. Understood this way, there are possibilities to observe the teaching presence in secondary school settings. Borup et al. (2014) constructed a new term called *teacher engagement* which includes a stronger emphasis on teacher presence. Borup et al. acknowledged that the CoI model has partially identified these elements, however, a greater emphasis on these elements are needed in the high school online learning environment. Teacher engagement involves three important elements: nurturing, motivating and monitoring. The reasons behind the chosen term are:

- a) to distinguish the new construct from *teaching presence*
- b) to use the term *engagement*, which is familiar in the K-12 literature [related to the high school setting]
- c) to emphasize caring and committed action that is often required in K-12. The term *presence* is passive (Pushor & Ruitenberg, 2005)

(Borup et al. 2014, p.795)

In this study, the researchers have also adapted the facilitating discourse element suggested by Garrison et al. (2000). Borup et al.'s facilitating discourse descriptor is not considered as it involves facilitation with parents, between parents and among students which is not applicable in the Malaysian context. Therefore, the current study preferred to adapt facilitating discourse suggested by Garrison et al. (2000) and Borup et al.'s (2014) teacher engagement as illustrated in Table 1.

Table 1. Framework adapted from Borup et al. (2014) and Garrison et al. (2000).

Designing and Organizing	<ul style="list-style-type: none"> • A mix of individual and group learning activities and establishing a timeline. • Clear instructions, visual, interactive elements and personal examples relevant to students.
Facilitating Discourse	<ul style="list-style-type: none"> • Identify areas of agreement/disagreement • Seek to reach consensus/understanding • Encourage, acknowledge or reinforce student contributions • Establish climate for learning • Involve participants and prompt discussions • Assess the efficacy of the process

Instructing	<ul style="list-style-type: none"> • Direct instructions
Nurturing	<ul style="list-style-type: none"> • Maintain a level of care and respect. Prevent online conflict and bullying • Audio communication and topic not directly related to course content
Motivating	<ul style="list-style-type: none"> • Multi-media praise and incentives to increase student engagement
Monitoring	<ul style="list-style-type: none"> • Monitor the students management of time and progress towards mastering learning objectives

5. Methodology

In this study, the researchers were keen on discovery and interpretation rather than hypothesis testing. Therefore, a qualitative research design was chosen to explore the teachers' engagement. The research utilised the qualitative interpretative case study within a bounded time frame with two groups of students (six students in each group) and the respective two teachers.

6. Participants

Purposive sampling was employed to select the participants made up of two English teachers and their respective classes. One class came from an urban secondary school while the other class came from a sub-urban secondary school. Both teachers were comparable in their ages, length of teaching experience, and educational backgrounds. While both possessed good ICT skills, they had no prior experience teaching the students in an online writing environment. The two teachers were required to form a group of six students to complete their online narrative writing tasks. Mixed abilities of students from the advanced and intermediate level for English language were considered in this study in order for them to contribute ideas and be involved in the online interactions with the teacher. The low ability students were not included in this study as they may not be able to participate fully in the study. Three students were selected from each of the levels (advanced and intermediate) using their Year 9 public examination English results. According to Vygotsky (1978) a student is able to learn better if he or she is able to interact with others who are more knowledgeable and competent.

7. Materials

The narrative writing skills that were taught to the students in this study is a component of the Year 10 writing skills. The narrative writing task was based on the Year 11 standardized public examination which is used to gauge the students' potential to express their ideas accurately and creatively in written English (Curriculum Specifications, 2003). The instructional materials for the narrative writing were based on the SPM (public examination) syllabus. Materials were supplied by the researcher and posted by the teacher in Weeks 1, 3 and 5. The selection of the materials was based on current topics that were related to students' experiences and interesting events that had the potential to generate discussion. The sample essays were adapted from *Mode Compositions and Summaries for SPM* (Sebastian & Roy, 2005) and *SPM Total Revision Books* (Koh, 2005).

8. Online writing lesson design

Teachers created a closed group in the Facebook environment and allowed the two groups of six students to join. Teacher A's group was called 'Narrative Writing' and Teacher B group was called 'Narrative Writing 1'. The research was conducted for six weeks. The teachers in their Facebook environment uploaded the title, tips, suggestions and the format of the narrative writing. The titles of the narrative writing tasks were:

Task 1: Describe the most embarrassing experience you have had.

Task 2: Write a story beginning with "the students were excitedly unloading their luggage".

Task 3: Write a story ending with "tears welled up in his eyes".

Students were also guided to write the narrative essays based on Labov and Waletzky's (1967) narrative structure.

Abstract: What is the story about?

Orientation: Who, when, where, what?

Complicating Action: Then what happened?

Evaluation: So what, how is this interesting?

Result of resolution: What finally happened?

Coda: That's it. I've finished and am "bridging" back to our present situation.

The teachers uploaded the sample lessons for the Task 1 and Task 2. For Task 3, teachers only put up the title of the essays without any sample lessons. A sample of a lesson plan for Task 1 is illustrated in the following section.

8.1. Sample of a lesson plan

Task 1

The title of this week's essay is: **Describe the most embarrassing experience you have had.** To write this essay you need to read the following steps: Be clear about the question and think of possible situations you could write on.

1. It is good to incorporate real experiences in your story as you will be able to put in interesting and vivid details about them. Your story should be logical and consistent.
2. Use dialogue at certain point of your story to create a dramatic impact.
3. Use appropriate vocabulary and sentence structures.
4. The possible situations for the above title:
 1. Torn trousers.
 2. Slipped on a banana skin.
 3. Being fooled on April Fool's Day.
 4. Late for school
5. Write the essay according to Labov and Waletzky's narrative structure.

8.2. Instructor's Sample Essay

Abstract

The morning the sun shone persistently on my still-shut eyelids. Annoyed, I rolled on to the right side of the mattress. Wondering about the time, I stretched out my arm to grasp the alarm clock

on my bedside table. I forced open my eyes, focused them on the numbers... and screeched! Leaping out of my bed, I swung open the wardrobe door. Throwing my uniform on the bed. I dashed to the bathroom. Halfway I spun around and grabbed my school bag, deciding not to brush my teeth. Soon, I had shoved my feet into my shoes and pounced onto my bicycle. My parents stood motionless, staring at me as I whizzed past.

Orientation

As my bicycle raced on, I noticed that a group of schoolgirls looking my way with great interest. Well, well! Obviously, I was still attractive even with uncombed hair. My heart was pounding furiously in my chest as I whirred past a few cars on the road. The drivers seemed to stare with disbelief that one could pedal so swiftly. In no time, I reached the school gate, which was just about to be closed. Without bothering to explain myself to the priggish duo on guard duty, I hopped off my bike and dashed off. After locking my precious iron steed at the shed, I sprinted to the school hall. As I burst into the hall, I broke to change direction and made a beeline for the back of my class. Screeching to a halt, I took my place behind my classmates.

Complicating Action

In the whole gathering of students, I seemed to be the centre of attraction. It did not matter much to me at the moment for I was used to being looked at. However, to say the least, I was surprised when everyone stopped staring blankly at me and started to giggle. Suddenly, the whole hall was filled with roars and bellows of laughter. Smiling at my audience, I decided to take a bow. Then I noticed that the bottom half of my trousers were the wrong colour. My line of vision moved upwards, revealing that the rest of my pants were wrong colour and so was my shirt. At first, even my powerful brain could not figure it out. "Daniel! Why on earth are you in pyjamas" my friend blurted out amidst the hollers of laughter.

Evaluation

The feeling of sheer horror swept through my entire frame. My mouth was stuck open in an 'O' shape for seconds. My mind was filled only with shock as darkness mercifully started to engulf me. Once again, awoke with lights playing on my eyelids. At first I had little memory of what had happened, but one look at the group of people peering down at me brought the whole incident back to mind.

Result of Resolution

The young boys were all clad in white uniforms and grinning quite lunatically at me. In the high corner of the room, I saw a red crescent. Then the horrible little squirts started to call out for their seniors. Outside, I heard fresh gales of laughter. The brats were chortling.

Coda

I was still clad in pyjamas. Not knowing what else to do, I feigned unconscious again.

Source: Wee (2004)

9. Data collection and analysis

9.1. Data analysis

The study examined the online messages from the teachers’ interaction on an online narrative writing platform. The online messages were categorized according to Borup et al.’s (2014) and Garrison et al.’s (2000) frameworks. Two coders and the researchers were involved in coding the interactions. The coders were instructed to code individually. The inter-rater reliability was checked by using raw percentage suggested by Miles and Huberman (1994). The discrepancies were resolved through a discussion with the coders. This study used content analysis in coding the interactions. There was 90% agreement for teaching presence for Teacher A and 85 % agreement for Teacher B. The agreement percentage obtained here was consistent with Miles and Huberman’s suggestion of a minimum percentage of 70%. Additionally, inter-rater reliability was obtained by using Cohen kappa procedures. The value for Teacher A’s engagement was 0.80 and for Teacher B it was 0.85. Both the values are considered almost perfect agreement. Findings were organised according to the six descriptors of teacher engagement following Borup et al.’s framework.

9.2. Interactions based on Borup et al.’s framework

In Table 2, the online interaction archives of Teacher A and B were analysed in terms of occurrence based on Borup et al.’s framework.

Table2. Numerical Distribution of Teacher Engagement for Teacher A and Teacher B.

Descriptors	Teacher A	Teacher B
Designing and Organizing	8	3
Facilitating Discourse	53	1
Instructing	20	1
Nurturing	3	-
Motivating	25	-
Monitoring	18	14

Based on Table 2 most of the interactions are from Teacher A. Teacher B has limited interactions. The total number of Teacher A’s interactions was 127 while that of Teacher B’s was 18. The most frequent descriptor in Teacher A’s interactions was facilitating discourse, followed by motivating, instructing, monitoring and designing and organizing.

Most of Teacher B's interactions were related to monitoring, followed by designing and organizing and instructing. There were no interactions related to motivating and nurturing. We shall look at these differences in greater detail.

9.3. Designing and organizing

The teachers have placed the students in a closed group and instructed all the students to register and respond to their messages. The teacher as the subject matter expert posted title as well as gave tips and suggestions for students to write their essays. For example, *"The title of this week's essay is..."*. Teacher A guided the students to write narrative essays based on the Labov and Waletzky's narrative structure. The teacher set the time for the students to complete the task. Teacher A stated *"please review your essays respectively and upload your final draft essay by Saturday"*. Teacher B similarly uploaded the title and the Labov and Waletzky's narrative writing structure. However, she has to keep asking the participants to respond a number of times before they can start the narrative writing task. She states *"A job well done by all except Yee Juin as she has not joined the group or posted an essay. Please contact her and tell her to do so... please read your friends essay and feel free to comment on the work so that they can improve it"*.

9.4. Facilitating discourse

Analysis found that Teacher A worked to facilitate discourse with students. Teacher A encouraged and acknowledged and reinforced contributions *"I like this sentence description... it creates the image of a beach in mind while I read it. To set the climate for learning she asked the students to "Please share your ideas and comments. If you have any good websites that offer ideas in narrative writing, please do suggest"*. Teacher A also prompted discussion by questioning other participants in her post, *"What do you think about Valentino's essay"*. Teacher B encouraged the participants to discuss. She commented that *"The chosen one please help out your friends"*. However, Teacher B was not active in facilitating discourse as compared to Teacher A.

9.5. Direct instruction

Teachers A and B guided the students to correct their errors. Teacher dominated the interactions and stepped in to solve language problems particularly on the grammatical aspect. For example, *"here are some errors done by you. I have listed them and students I want you to discuss and correct them..."*. Teacher A also focused her discussion on specific issues and encouraged them to work on these aspects to write better. She encouraged students to use creative idiomatic expressions in essay writing. The teacher said *"students if you think you are not good at using creative idiomatic expressions in your essay? Try to practice on this simple exercise by finding meaning of the idiomatic expressions"* and for students who were unsure of the tenses, she encouraged them to *"use the link to check your sentences as the site can check your errors by itself and explain the kind or errors you have made"*. Teacher B only instructed the students to make the appropriate changes to the essay to produce a good quality essay. She said *"please pay attention to the highlighted words. There are some corrections there. A good example of an embarrassing moment however it would have been better if it was revealed at the end only, improve the essay and post it"*.

9.6. Nurturing

Teacher A gave a few suggestions for students to improve their narrative writing which were not directly related to the task. She wrote *"Direct translation from Mandarin or Bahasa Melayu into English will cause errors in grammar, sentence structure and meaning. A good narrator must have good vocabulary knowledge. To improve on that you must do a lot of reading"*. Teacher A also shared her experience and showed a level

of respect for their ideas by stating "Teacher too has similar experience ... walking to the wrong car n tried to open the door... was embarrassing yet funny. Laughed to myself at that moment". Also Teacher A guided the students when they had technical problems while using their computers to look for certain websites "You try to surf through online dictionary which can suit your computer security setting". Teacher A also encouraged students to search for useful information to improve their essays. For example, "Here are some sites for all of you to get to know creative expressions, proverb colloquial expressions and etc." There was no interaction related to nurturing from Teacher B.

9.7. Motivation

Teacher A was able to motivate students by regularly reading their postings and attending to their doubts. The teacher acknowledged the students' contribution and assured the students that "you all can write better than the sample," "your narration is indeed written well and creatively" and "We are here to help each other and improve to be better... We are here". Teacher B had only one post which showed her motivating her students. She encouraged them to continue working on their writing task by commenting "Well done, keep it up".

9.8. Monitoring

Teacher A monitored the students' writing task. This was expressed in the following post:

That's good. It shows that you are aware of the important elements in an essay. However, a good essay not only should have good expression words and phrases, variety of sentence structures and grammatically correct. It should be well structured.

Teacher A made concerted efforts to continue to give confidence and encouragement. Some of her comments were:

Good narration but lack of creativity touch. Try to think of the story flow that can arouse the reader's interest and sustain it throughout the reading process.

and

Good attempt but you have the potential to write better.

Teacher B also made attempts to monitor the students' essay writing. Teacher B questioned the students when the essays were not submitted. She asked:

Where are the rest of the essays.

and

Please submit as soon as your tests are over.

She also acknowledged the students' contribution and commented that

Mmm... quite well written with some minor errors but the story does not seem very embarrassing. Will give more tips later. Anyway not bad for a start.

Tables 3 and 4 illustrate the descriptors related to teacher engagement.

Table 3. Descriptors related to teacher engagement (Teacher A).

<p>Designing and organizing</p>	<p>THIRD TASK</p> <p>The title of this week's essay is:</p> <p>Write a story ending with "tears welled up in his eyes". To write this essay you need to take the following steps.</p> <p>...</p> <p>See More</p> <p>Like · Comment · Unfollow Post · July 23 at 11:02am</p>
<p>Facilitating discourse</p>	<p>Interesting essay about a student. Well done</p> <p>Edited · Like</p>
<p>Instructing</p>	<p>THESE ARE SOME ERRORS DONE BY YOU. I HAVE LISTED THEM AND STUDENTS I WANT YOU TO DISCUSS AND CORRECT THEM. YOU CAN ALSO SHARE YOUR IDEAS AND SUGGESTION TO IMPROVISE IT. But it all happens in a blink of eye..... the students remained excitedly in the bus..... Everyone on the bus was shocked and the students who were excited before that turned silent..... onto the boundaries of the road..... the police immediately..... Luckily there were no more students nor teachers who was injured in the accident..... to have a unforgettable..... a new bus came to drove the students and teachers back to their school..... indeed a unpleasant trip for them..... Peony Moon, Joyce Chee, Valentini Belbo, Catelite Nina and Deer Tommy...PLEASE LOOK EACH ERRORS AND FIND THE RIGHT WAY TO WRITE THEM.</p> <p>July 14 at 3:24pm · Edited · Like</p>
<p>Nurturing</p>	<p>Nanthini Maniam</p> <p>Students, do you think you are not good at using creative idiomatic expression in your essay ? Try to practice on this simple exercise by finding meaning of the idiomatic expressions. (Joyce Chee, Monster KBlue, Deer Tommy, Catelite Nina, Valentini Belbo and Peony Moon)</p> <p>Below are the most common idiomatic expression according to user ratings. Please be sure to rate how often you hear or read the idiomatic expression so we all can get a better idea how often the expressions are used. For reference, you can use this link http://idiomaticexpressions.org/most-common-idiomatic-expressions</p>
<p>Motivating</p>	<p>A NARRATIVE WRITING STRUCTURE</p> <p>Hi students.....How are you all today? Well, you all have shared and explained a lot on how a good essay should be. That's good. It shows that you all are aware of the important elements in an essay. However, a good essay not only should have good expression words and phrases, variety of sentence structures and grammatically correct. It also should be well-structured (the organisation of your ideas).</p>

Monitoring	<p>Catelite Nina...You narration is indeed writt well and creatively. There are some grammatical errors which y friends had tracked down. To make an essay sustain the reade interest to read you can include some suspense at the part wh the crab bit your nose. You can make the reader to wonder wh would it be. Using SUSPENSE in essay will make the storyline t interesting</p> <p>June 30 at 12:28am · Like · ↻ 2</p>
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The following table illustrates the descriptor related to Teacher B.

Table 4. Descriptors related to Teacher B engagement.

Designing and organizing	<p>All members , if you have read your assignment please re you got it. Please pass this message to Lee Yee Juin as s responded to the invitation to join.</p> <p>Dear Shu Suet, Please pay attention to the highlighted words. there are some corrections there. A good example of an embarrassing moment however it would have been better if it was revealed at the end only. improve the essay and repost it.</p>
Facilitating discourse	<p>The Chosen Ones please help out your friend _ike</p>
Instructing	<p>Dear Shu Suet, Please pay attention to the highlighted words. there are s there. A good example of an embarrassing moment howe have been better if it was revealed at the end only. impro repost it.</p>
Nurturing	-
Motivating	-
Monitoring	<p>Where are the rest of the essays? Please submit as soon are over</p> <hr/> <p>Mmmm quite well written. Some minor err the story does not seem very embarassing . Will give more tips later not bad for a start.</p> <p>2 August 2014 at 16:19 · Like</p>

9.8. Scores of the writing task

When the essay scores were analysed it was found that students who interacted with Teacher A improved the quality of writing. The scores for their essays improved after their online interactions. However, students in Teacher B's group were not motivated to

complete their essays after the interaction. There were no comments from Teacher B to get students to improve their narrative writing. This probably caused them to not make any attempt to improve their essays after the interactions. Table 5 illustrates the scores of the narrative writing task for Teacher A and B before interactions (BInt) and after interactions (AInt). Students who belong to the Narrating Writing A group were coded A1 to A6 and from Narrative writing B, were given B1 to B6.

Table 5. Narrative writing scores.

Students	Task 1		Task 2		Task 3	
	BInt	AInt	BInt	AInt	BInt	AInt
A1	66	68	67	70	73	73
A2	65	68	64	65	69	71
A3	74	76	67	69	68	71
A4	65	69	69	71	69	69
A5	64	65	71	73	65	65
A6	80	82	83	84	81	81
B1	75					
B2	65	65	63	-	62	-
B3	63	-	63	-	60	-
B4	62	-	61	-	62	-
B5	58	-	55	-	59	-
B6	56	-	56	-	58	-

10. Discussion

The application of Borup et al.'s (2014) framework in the Malaysian context helps to explain the many activities that the teachers do while they are engaged in an online writing environment. All five dimensions of designing and organizing, facilitating discourse, instructing, nurturing, motivating and monitoring were useful in the Malaysian context.

Although both teachers gave the same teaching and learning activities the findings were different. This is probably due to the differences in teacher engagement. The engagement of Teacher A was more active. Teacher A was constantly monitoring the students on grammatical and language structures. Previous research has suggested that language students must be frequently instructed to check on their sentence structures and grammar (Legenhausen 2011). Such guidance eventually helped the students to improve their sentence structures. Teacher A acted as an adoptive facilitator to complete their online narrative writing task. There were interactions related to designing and organizing and facilitating discourse. Consistent with this, Harms et al. (2006) claim that teachers must organize and design learning materials to encourage students to be engaged in the teaching and learning activities. Teacher A has pointed out misconceptions, listened to students' ideas, clarified ideas and suggestions. As a result, the students responded and made the necessary changes to their essays. Evidently, the scores were better for their narrative essays. Previous literature supports the view that introducing sources of information, giving directions for useful discussion and encouraging students' knowledge to a higher level (Ice et al., 2007; Richardson & Swan, 2003) is beneficial.

Teacher B only provided general assistance for students to complete their essays. Although Teacher A and Teacher B initiated the task by giving the title and narrative writing task, Teacher B was not actively involved in the online interactions. As a result students were not able to improve the quality of their essays. In fact some of the students did not submit their assignments. According to Di Pietro, Ferdig, Black and Preston (2008) teachers need to proactively facilitate content for students to perform well in the task given. Also Rojas-Drummonda & Merce (2003) highlighted that successful teaching activities need teachers that are not only focused in completing a task but to also guide the students to reach the goal and solve the problems with appropriate procedures There were no interactions related to motivating and nurturing in Teacher B's interactions.

The role of Teacher A and Teacher B in this study was more on instructing and monitoring rather than facilitating them to write According to Annamalai and Tan (2015) the role of the teacher is rather authoritative and distancing as the teachers in the Malaysian schools are in the state of transition from traditional classroom writing to the online writing environment. It is also worth noting that interactions between students and instructors are rather low if interactions are not initiated or promoted by instructors (Hawkins et al., 2011). Continuous interaction is necessary to ensure that students are able to complete the task given. The set back is probably due to the attitude of the teacher who is a digital immigrant (Prensky, 2001) and not so keen to introduce technology in their writing classes. Teacher B was probably not keen in nurturing and helping students to discover other areas of writing. The teacher might be comfortable with the tradition classroom writing. Future research can deal with surveys and interviews to investigate the reasons for such findings.

11. Implications

The study carries several pedagogical implications as follows:

Borup et al.'s (2014) framework is applicable in the Malaysian setting. However, the researchers had difficulties in categorizing the interactions related to, motivating and monitoring as certain interactions can be categorised in both descriptors. In other words, the definitions are rather fuzzy. Therefore clear definitions are needed for the descriptors.

As mentioned earlier parents are not involved in the online teaching and learning activities. Perhaps, interactions with parents, teacher and students will be a great factor

to encourage students to be actively engaged in online writing environment particularly in sub-urban schools.

As this is an exploratory study, the findings only reported what happened in the natural settings. Future research should consider interviews and reflections to gain in-depth understanding of such findings and be able to shed light on how best to implement the online writing environment. The limitations in this study should be addressed in future studies. Firstly, conducting a case study is important to understand the in-depth situation of a study although the nature of such a study limits possible generalization to other studies.

Research conducted in several other settings in Malaysia will yield more generalizable results. Quantitative studies such as surveys and experimental research should also be added. Workshops and checklist of Borup et al.'s framework should be given to teachers so that teachers are able to interact effectively with students to maximize learning. This will cultivate positive attitudes and confidence.

12. Conclusion

The study affirms that teacher's active engagement is necessary to motivate and facilitate students' interactions which eventually help them to improve their quality of writing. Without teachers engagement students' involvement is limited. The study offers an insightful implication that Borup et al.'s framework will be applicable in the Malaysian context if the teachers' are willing to accept technologies and show commitment in facilitating their students. Although the use of ICT in schools is encouraged in Malaysian schools, teachers do not seem to see the great potential of technology in language learning.

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Recommended website

Bab.la: Loving languages

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bab.la, created by Andreas Schroeter and Patrick Uecker, is a free online language portal comprising 40 dictionaries for 28 languages, a language forum, vocabulary lessons, language games, quizzes, verb conjugation for 11 languages and phrase books for university, business or travel among a number of other language-related products.

The *bab.la* dictionaries (Fig. 1) offer the possibility of entering a word or browsing through the letters of the alphabet to see all the entries for a given letter. Users can also suggest new translations. In order for new user-contributed phrases or words to be permanently included, they have to be approved. Users can vote on these contributions and specify whether they think they are correct or incorrect and suggest changes to the spelling, grammar or wording. By registering, users become members of the *bab.la* community and can earn points by contributing to the dictionaries and participating in forums. The words in the dictionaries are sound-enhanced with native pronunciations.

The screenshot shows the Bab.la dictionary interface for the word "word". It includes a sidebar with forum results, a main definition section with synonyms and similar translations, and a context sentences section.

word (noun)

word (noun) [ɪŋɡ]
I wish to conclude with a further warm word of thanks to the rapporteur, Mrs Peijs.

word (noun)
And when we hear the word 'health' of course we all immediately think 'tobacco'.

word (noun) (also: term)
Cusco (Peru) "Khoka, (the Plant), Aymara word for its early origins".

término [m] [ɪŋɡ]
Y termino volviendo a expresar mis más sentidas gracias a la ponente, Sra. Peijs.

palabra [f]
Y cuando oímos la palabra «salud», todos pensamos inmediatamente en el «tabaco».

vocablo [m]
Cusco (Peru) "Khoka, (La Planta) vocablo aymara con el cual fue denominada en sus orígenes".

SYNONYMS
Synonyms (English) for "word":
give voice · formulate · phrase · articulate · news · intelligence · tidings · password · watchword · parole · countersign · discussion · give-and-take · word of honor

SIMILAR TRANSLATIONS
Similar translations for "to word" in Spanish

bad word	palabrota
curse word	palabrota
pet word	coletilla, muletilla
swear-word	palabrota
word list	léxico
word presentation	representación de palabra
word processing	tratamiento de textos, procesamiento de texto
word processor	procesador de textos

CONTEXT SENTENCES
Context sentences for "to word" in Spanish
⚠ These sentences come from external sources and may not be accurate. bab.la is not responsible for their content. Read more [here](#).
We must, in other words, improve the overall package with accompanying measures. Esto significa que mejoraremos las condiciones marco con medidas de acompañamiento.

Figure 1. *bab.la* dictionary interface.

The *bab.la* Phrase Dictionary (Fig. 2) includes translations of common phrases and expressions organised into 6 categories: applications and résumés; academic discourse;

business; personal correspondence; travel, and immigration. Each category is in turn divided into comprehensible subcategories to narrow down the context. Each phrase includes a description to aid in situating its context. Some of the categories provide links to other sites where templates are available. Additionally, each of the subcategories can be downloaded as a PDF file.

The screenshot shows the 'bab.la Phrases' website interface. The main content area is titled 'bab.la Phrases: Immigration | Documents (French-Spanish)'. It features a table with three columns: 'French (change)', 'Spanish (change)', and 'Description'. The table lists various phrases related to immigration documents, such as 'Où se trouve le formulaire pour ___?' and '¿Dónde tengo que pedir el formulario/impresso para ___?'. On the left side, there is a 'Category' menu with options like 'Application', 'Academic', 'Business', 'Personal', 'Travel', and 'Immigration'. Below the menu, there are social media links for Twitter, Facebook, and Google+. The top navigation bar includes 'bab.la Phrases', 'Dictionary', 'Conjugation', 'Forum', and 'More by bab.la'.

Figure 2. *bab.la* phrase book interface.

The verb conjugator (Fig. 3) provides quick access to all the tenses for a given verb, providing also synonyms, translations and sample sentences.

The screenshot shows the 'bab.la Conjugation' website interface. The main content area is titled 'Conjugate "to speak" - English conjugation'. It features a table with three columns: 'Present', 'Present continuous', 'Simple past', 'Past continuous', 'Present perfect', 'Present perfect continuous', 'Past perfect', 'Past perfect continuous', 'Future', 'Future continuous', 'Future perfect', and 'Future perfect continuous'. Each column lists the corresponding verb forms for 'to speak'. On the right side, there are social media links for Twitter, Facebook, and Google+. The top navigation bar includes 'bab.la Conjugation', 'Dictionary', 'Phrases', 'Forum', and 'More by bab.la'.

Figure 3. *bab.la* conjugator interface.

Each of the 28 languages included in *bab.la* has its own forum, where users can post any type of question relating to a given language, enquiring about the meanings of words, seeking advice on a particular translation, etc.

The section called Wording allows users to search for correct sentence structures. The wording tool acts as a correct sentence structure checker, e.g. by associating correct examples of prepositions with common language usage to provide suggestions for the proper preposition.

Bab.la offers a number of other tools such as quizzes, word games, grammar explanations, vocabulary lessons, a world language map (Fig. 4), etc., all of which have been designed to help language learners and language enthusiasts from around the world.



Figure 4. World language map in English.

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